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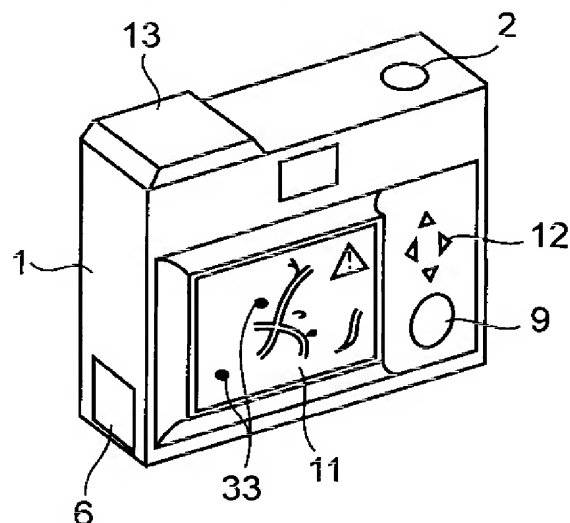
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(54)【発明の名称】 撮影地点誘導機能、撮影条件設定機能付きカメラおよび撮影地点誘導、撮影条件設定サービスシステム

(57)【要約】

【課題】 一般の撮影者であっても、プロのカメラマンのみが知り得るような絶好の撮影地点で写真撮影を行うことを可能にすると共に、その撮影地点に迅速かつ確実に到達できるようにし、しかも、撮影者に対する撮影地点データの提供をビジネスとして成立させることを可能にする。

【解決手段】 カメラ1に、撮影地点データを登録する機能と、該撮影地点データに基づいて所定の撮影地点に撮影者を誘導する機能とを設け、データ提供サーバ26、CD-ROM28、或いは写真集29で撮影地点データを提供する。



【特許請求の範囲】

【請求項1】 撮影地点データを登録するデータ登録手段と、該撮影地点データに基づいて所定の撮影地点に撮影者を誘導する撮影地点誘導手段とを有することを特徴とする撮影地点誘導機能付きカメラ。

【請求項2】 所定の撮影地点に対応した撮影条件データを登録するデータ登録手段と、該撮影条件データに基づいて所定の撮影条件をカメラに設定する撮影条件設定手段とを有することを特徴とする撮影条件設定機能付きカメラ。

【請求項3】 前記データ登録手段は、データ提供サーバが接続されるネットワークに対し、有線もしくは無線状態で接続可能であって、前記データ提供サーバが送信した撮影地点データまたは撮影条件データを受信してカメラの記憶部に登録することを特徴とする請求項1または2に記載の撮影地点誘導機能および撮影条件設定機能付きカメラ。

【請求項4】 前記データ登録手段は、ネットワークを介してデータ提供サーバに接続される端末に対し、有線もしくは無線状態で接続可能であって、前記データ提供サーバが送信した撮影地点データまたは撮影条件データを前記端末経由で受信してカメラの記憶部に登録することを特徴とする請求項1乃至3のいずれかに記載の撮影地点誘導機能および撮影条件設定機能付きカメラ。

【請求項5】 前記データ登録手段は、所定の記憶媒体に格納された撮影地点データまたは撮影条件データを読み取り可能な端末に対し、有線もしくは無線状態で接続可能であって、前記記憶媒体に格納された撮影地点データまたは撮影条件データを前記端末経由で受信してカメラの記憶部に登録することを特徴とする請求項1乃至4のいずれかに記載の撮影地点誘導機能および撮影条件設定機能付きカメラ。

【請求項6】 前記データ登録手段は、所定の印刷媒体にバーコードとして印刷された撮影地点データまたは撮影条件データを読み取り可能な読み取り装置に対し、有線もしくは無線状態で接続可能であって、前記印刷媒体に印刷された撮影地点データまたは撮影条件データを前記読み取り装置経由で受信してカメラの記憶部に登録することを特徴とする請求項1乃至5のいずれかに記載の撮影地点誘導機能および撮影条件設定機能付きカメラ。

【請求項7】 前記撮影地点誘導手段は、前記撮影地点データに基づいて特定した撮影地点と、GPS衛星電波に基づいて特定したカメラの現在地点と、両地点を含む地図とをモニタ上に表示すると共に、モニタ画像または音声によるガイドで撮影者を所定の撮影地点に誘導することを特徴とする請求項1乃至6のいずれかに記載の撮影地点誘導機能および撮影条件設定機能付きカメラ。

【請求項8】 前記カメラは、撮影地点データまたは撮影条件データを提供する所定のサーバにアクセス可能であって、該サーバとの間で前記撮影地点データまたは前

記撮影条件データの購入手続を行うためのデータ購入手段を有することを特徴とする請求項1乃至7のいずれかに記載の撮影地点誘導機能および撮影条件設定機能付きカメラ。

【請求項9】 データ提供サーバおよび複数のカメラを含む撮影地点誘導サービスシステムであって、前記データ提供サーバは、撮影地点データを提供するデータ提供手段を有し、前記カメラは、前記撮影地点データを登録するデータ登録手段と、該撮影地点データに基づいて所定の撮影地点に撮影者を誘導する撮影地点誘導手段とを有することを特徴とする撮影地点誘導サービスシステム。

【請求項10】 データ提供サーバおよび複数のカメラを含む撮影条件設定サービスシステムであって、前記データ提供サーバは、所定の撮影地点に対応した撮影条件データを提供するデータ提供手段を有し、前記カメラは、前記撮影条件データを登録するデータ登録手段と、該撮影条件データに基づいて所定の撮影条件をカメラに設定する撮影条件設定手段とを有することを特徴とする撮影条件設定サービスシステム。

【請求項11】 前記データ登録手段は、前記データ提供サーバが接続されるネットワークに対し、有線もしくは無線状態で接続可能であって、前記データ提供サーバが送信した撮影地点データまたは撮影条件データを受信してカメラの記憶部に登録することを特徴とする請求項9または10に記載の撮影地点誘導および撮影条件設定サービスシステム。

【請求項12】 前記データ登録手段は、ネットワークを介して前記データ提供サーバに接続される端末に対し、有線もしくは無線状態で接続可能であって、前記データ提供サーバが送信した撮影地点データまたは撮影条件データを前記端末経由で受信してカメラの記憶部に登録することを特徴とする請求項9乃至11のいずれかに記載の撮影地点誘導および撮影条件設定サービスシステム。

【請求項13】 前記撮影地点誘導手段は、前記撮影地点データに基づいて特定した撮影地点と、GPS衛星電波に基づいて特定したカメラの現在地点と、両地点を含む地図とをモニタ上に表示すると共に、モニタ画像または音声によるガイドで撮影者を所定の撮影地点に誘導することを特徴とする請求項9乃至12のいずれかに記載の撮影地点誘導および撮影条件設定サービスシステム。

【請求項14】 前記カメラは、撮影地点データまたは撮影条件データを提供する所定のサーバにアクセス可能であって、該サーバとの間で前記撮影地点データまたは前記撮影条件データの購入手続を行うためのデータ購入手段を有することを特徴とする請求項9乃至13のいずれかに記載の撮影地点誘導および撮影条件設定サービスシステム。

【発明の詳細な説明】

【0001】

【発明の属する技術分野】本発明は、所定の撮影地点に撮影者を誘導する撮影地点誘導機能や、所定の撮影地点に対応した撮影条件をカメラに設定する撮影条件設定機能を有するカメラ、または、撮影地点データや撮影条件データを提供するデータ提供サーバと前記機能を有する複数のカメラで構成される撮影地点誘導および撮影条件設定サービスシステムに関する。

【0002】

【従来の技術】一般に、美しい景観の撮影を主たる目的とし、カメラを所持して旅行をする撮影旅行者が多く存在する。このような撮影旅行者は、美しい景観を写真集や旅行パンフレットなどで目にしたことがきっかけとなり、景観への道筋に関する詳細な知識を得ないまま行動を余儀なくされる場合も少なくない。このため撮影旅行者は、目的の景観地点に到達するために多くの無駄な時間を費やしたり、目的の景観地点に到達することが出来なかったなどという結果に終わることもある。仮に目的とする景観地点に運良く到達出来たとしても、季節や時間が異なり、思い描いていた景色とは異なっていたという可能性もある。また、紙面の都合により掲載されなかった他の景色の存在を、その後に知って後悔するということもある。

【0003】近年、写真撮影を趣味とする若い女性やお年寄りの数が増加傾向にある。これは鉄道などの交通機関の発達により、短時間で観光地などの目的地に到達することが可能になったことが一つの要因と考えられる。また、カメラ自体の軽量化、自動化、及び写真フィルムの高性能化により、初心者であっても美しい写真が撮影出来るようになったことも大きな要因と考えられる。

【0004】しかしながら、例えばプロのカメラマンのみが知り得るような絶好の撮影地点などは、その詳細が明らかにされない限り、写真集や旅行パンフレットなどで目にしただけでは、その景観地点を探し出すことが困難であり、誰もが簡単に撮影することは出来ない。また、プロのカメラマンが撮影した写真は、カメラのセッティング（撮影条件の設定）などの撮影技術によって、より美しく仕上がっている場合が多く、仮に同一地点で撮影しても、出来上がった写真を見て失望することが想定される。

【0005】そこで、プロのカメラマンなどが有する撮影地点や撮影条件の知識を販売（提供）することが考えられるが、従来においては、写真集などに撮影地点や撮影条件（カメラ機種、シャッター速度設定、絞り設定など）を掲載する方法しかなく、これだけでは、売側にとっても、買側にとっても、十分なものであるとは言えず、ビジネスとして成立しないのが実状であった。

【0006】

【発明が解決しようとする課題】本発明は、上記の如き問題点を一掃すべく創案されたものであって、一般の撮

影者であっても、プロのカメラマンのみが知り得るような絶好の撮影地点で写真撮影を行うことが可能になるばかりでなく、その撮影地点に迅速かつ確実に到達することができる撮影地点誘導機能付きカメラを提供することを目的とする。

【0007】また、他の1の目的は、一般の撮影者であっても、その撮影地点における最適な撮影条件で写真撮影を行うことが可能となるばかりでなく、撮影条件の設定ミスによる撮影の失敗を防止することができる撮影条件設定機能付きカメラを提供することにある。

【0008】また、他の1の目的は、一般の撮影者であっても、プロのカメラマンのみが知り得るような絶好の撮影地点で写真撮影を行うことが可能になるばかりでなく、その撮影地点に迅速かつ確実に到達することができ、しかも、撮影者に対する撮影地点データの提供をビジネスとして成立させることができる撮影地点誘導サービスシステムを提供することにある。

【0009】また、他の1の目的は、一般の撮影者であっても、その撮影地点における天候や季節など現地環境を加味した最適な撮影条件によって写真撮影を行うことが可能になるばかりでなく、撮影条件の設定ミスによる撮影の失敗を防止することができ、しかも、撮影者に対する撮影条件データの提供をビジネスとして成立させることができる撮影条件設定サービスシステムを提供することにある。

【0010】

【課題を解決するための手段】上記課題を解決するために本発明の撮影地点誘導機能付きカメラは、撮影地点データを登録するデータ登録手段と、該撮影地点データに基づいて所定の撮影地点に撮影者を誘導する撮影地点誘導手段とを有することを特徴とするものである。

【0011】また、上記課題を解決するために本発明の撮影条件設定機能付きカメラは、所定の撮影地点に対応した撮影条件データを登録するデータ登録手段と、該撮影条件データに基づいて所定の撮影条件をカメラに設定する撮影条件設定手段とを有することを特徴とするものである。

【0012】また、上記課題を解決するために本発明の撮影地点誘導サービスシステムは、データ提供サーバおよび複数のカメラを含む撮影地点誘導サービスシステムであって、前記データ提供サーバは、撮影地点データを提供するデータ提供手段を有し、前記カメラは、前記撮影地点データを登録するデータ登録手段と、該撮影地点データに基づいて所定の撮影地点に撮影者を誘導する撮影地点誘導手段とを有することを特徴とするものである。

【0013】また、上記課題を解決するために本発明の撮影条件設定サービスシステムは、データ提供サーバおよび複数のカメラを含む撮影条件設定サービスシステムであって、前記データ提供サーバは、所定の撮影地点に

対応した撮影条件データを提供するデータ提供手段を有し、前記カメラは、前記撮影条件データを登録するデータ登録手段と、該撮影条件データに基づいて所定の撮影条件をカメラに設定する撮影条件設定手段とを有することを特徴とするものである。

【0014】

【発明の実施の形態】以下、本発明の実施の形態を好適な実施の形態として例示するカメラを図面に基いて詳細に説明する。図1はカメラの背面斜視図である。この図に示されるように、カメラ1は、シャッターボタン2、ファインダ3等のカメラ基本要素を備えて構成される。カメラ1の撮影方式としては、デジタルカメラ方式もしくはアナログカメラ方式が採用されるが、より美しい写真を得るという点においては、ハロゲン化銀写真感光材料を用いるアナログカメラ方式であることが望ましい。

【0015】図2はカメラの構成を示すブロック図である。この図に示されるように、カメラ1は、CPU、RAM、ROM等で構成される制御ユニット4を備える。制御ユニット4には、データ登録手段の構成要素である記憶部5と、データ登録手段の構成要素であるケーブル接続部6と、データ登録手段の構成要素である赤外線通信部7と、撮影地点誘導手段の構成要素であるGPS受信部8と、データ登録手段、撮影地点誘導手段およびデータ購入手段の構成要素であるスピーカ9と、データ登録手段の構成要素である無線通信部10と、データ登録手段、撮影地点誘導手段およびデータ購入手段の構成要素であるモニタ11と、データ登録手段、撮影地点誘導手段およびデータ購入手段の構成要素である操作スイッチ12と、データ登録手段および撮影地点誘導手段の構成要素であるアンテナ13と、撮影条件設定手段の構成要素であるシャッター速度調整ユニット14と、撮影条件設定手段の構成要素である絞り調整ユニット15と、撮影条件設定手段の構成要素であるズーム調整ユニット16と、撮影条件設定手段の構成要素であるストロボ17とが接続されている。また、制御ユニット4のROMには、データ登録手段の構成要素であるデータ登録プログラムと、撮影地点誘導手段の構成要素である撮影地点誘導プログラムと、データ購入手段の構成要素であるデータ購入プログラムと、撮影条件設定手段の構成要素である撮影条件設定プログラムとが予め格納されている。つまり、データ登録手段は、記憶部5、ケーブル接続部6、赤外線通信部7、スピーカ9、無線通信部10、モニタ11、操作スイッチ12、アンテナ13、データ登録プログラム等を用いて構成され、また、撮影地点誘導手段は、GPS受信部8、スピーカ9、モニタ11、操作スイッチ12、アンテナ13、撮影地点誘導プログラム等を用いて構成され、さらに、データ購入手段は、スピーカ9、モニタ11、操作スイッチ12等を連動作せしめるデータ購入プログラムを用いてシステム構成されており、以下、各構成要素の詳細を順次説明する。

【0016】記憶部5は、撮影地点データおよび撮影条件データを記憶するためのもので、撮影地点データには、撮影地点の緯度データ、経度データ等が含まれ、また、撮影条件データには、各撮影地点に対応したシャッター速度調整データ、絞り調整データ、ズーム調整データ、ストロボ調整データ等が含まれる。

【0017】ケーブル接続部6は、モバイルコンピュータ18a、デスクトップコンピュータ18b、セルフオペレーション端末18c等の端末18とケーブル19を介して通信を行うためのもので、例えばUSB規格に準拠したケーブル通信ポートで構成される。

【0018】赤外線通信部7は、モバイルコンピュータ18a、デスクトップコンピュータ18b、セルフオペレーション端末18c等の端末18やバーコードリーダ20と赤外線信号を介して通信を行うためのもので、例えばIrDA規格に準拠した赤外線通信ポートで構成される。

【0019】GPS受信部8は、アンテナ13を介してGPS (Global Positioning System) 衛星21の電波を受信するためのもので、受信したGPS衛星電波に基づいてカメラ1の現在地点を特定することが可能になる。尚、カメラの現在地点特定方法としては、カメラから電波を送信し、該電波を受信したアンテナの位置を元に基地局からカメラの位置情報を送信し、これをカメラで受信して現在地点を特定する方法等、GPS以外の方法を採用してもよい。

【0020】無線通信部10は、図3に示すように、アンテナ13および基地局22を介してカメラ1をインターネット23に接続するためのもので、例えば携帯電話モジュールやPHSモジュールで構成される。

【0021】モニタ11は、データ登録画面、撮影地点誘導画面、データ購入画面等を表示するためのもので、例えば液晶表示パネルで構成され、カメラ1の背面部に設けられる。また、操作スイッチ12は、モニタ11の近傍に設けられており、例えばモニタ画面もしくは音声による操作要求に応じて操作される。

【0022】シャッター速度調整ユニット14、絞り調整ユニット15、ズーム調整ユニット16およびストロボ17は、カメラ1の撮影条件（シャッター速度、絞り、焦点距離およびストロボ条件）を調整するためのもので、前記撮影条件データに基づく撮影条件の自動調整を可能にする。

【0023】データ登録プログラムは、モバイルコンピュータ18a、デスクトップコンピュータ18b、セルフオペレーション端末18c、バーコードリーダ20等から撮影地点データや撮影条件データを受信し、該受信データを記憶部5に登録するようにカメラ1を動作させるためのものであり、以下、各種のデータ登録形態を図面に沿って説明する。

【0024】図4はデータ提供サーバのデータをモバイ

ルコンピュータ経由でカメラに登録する場合の説明図である。この図に示されるように、カメラ1は、モバイルコンピュータ18aにケーブル19を介して接続される。モバイルコンピュータ18aは、無線通信モジュール24を備え、例えばアンテナ25を備える無線ルータ（図示せず）を介してインターネット23に接続される。インターネット23上には、後述するデータ提供サーバ26（WEBサーバ）が存在し、モバイルコンピュータ18aは、汎用ブラウザを介してデータ提供サーバ26と通信を行う。ブラウザ画面上では、撮影地点の検索、データ購入契約等が可能であり、データ購入契約を済ませると、撮影地点データおよび撮影条件データのダウンロードが許可される。モバイルコンピュータ18aにダウンロードされた撮影地点データおよび撮影条件データは、ケーブル19を介してカメラ1に送信され、記憶部5に登録される。尚、モバイルコンピュータ18aが赤外線通信ポートを備える場合は、ケーブル19を用いることなく、ワイヤレスでデータ登録を行うことができる。

【0025】図5はデータ提供サーバのデータをセルフオペレーション端末経由でカメラに登録する場合の説明図である。この図に示されるように、カメラ1は、コンビニエンスストア等に設置されるセルフオペレーション端末18cにケーブル19を介して接続される。セルフオペレーション端末18cは、例えばルータ（図示せず）を介してインターネット23に接続され、専用ブラウザを介してデータ提供サーバ26と通信を行う。ブラウザ画面上では、撮影地点の検索、データ購入契約等が可能であり、データ購入契約を済ませると、撮影地点データおよび撮影条件データのダウンロードが許可される。セルフオペレーション端末18cにダウンロードされた撮影地点データおよび撮影条件データは、ケーブル19を介してカメラ1に送信され、記憶部5に登録される。尚、セルフオペレーション端末18cが赤外線通信ポートを備える場合は、ケーブル19を用いることなく、ワイヤレスでデータ登録を行うことができる。

【0026】図6はCD-ROMのデータをデスクトップコンピュータ経由でカメラに登録する場合の説明図である。この図に示されるように、カメラ1は、デスクトップコンピュータ18bにケーブル19を介して接続される。デスクトップコンピュータ18bは、CD-ROMドライブ27を備え、予め購入したCD-ROM28がセットされる。CD-ROM28には、複数のサンプル画像と共に撮影地点データおよび撮影条件データが格納されており、その中から選択した撮影地点データおよび撮影条件データがケーブル19を介してカメラ1に送信され、記憶部5に登録される。尚、モバイルコンピュータ18aが赤外線通信ポートを備える場合は、ケーブル19を用いることなく、ワイヤレスでデータ登録を行うことができる。

【0027】図7は写真集のデータをバーコードリーダー経由でカメラに登録する場合の説明図である。この図に示されるように、予め購入した写真集29には、複数の景観写真29aと共に撮影地点データおよび撮影条件データがバーコード29bとして印刷されており、その中から選択した景観写真29aのバーコード29bをバーコードリーダー20で読み取る。バーコードリーダー20は、赤外線送信部20aを備えており、読み取った撮影地点データおよび撮影条件データが赤外線信号としてカメラ1に送信され、記憶部5に登録される。

【0028】撮影地点誘導プログラムは、記憶部5に登録された撮影地点データに基づいて撮影地点を特定すると共に、GPS衛星電波に基づいてカメラ1の現在地点を特定し、両地点を含む地図をモニタ11上に表示する。さらに、現在地点から撮影地点までのルートモニタ11上の画像または音声でガイドし、撮影者を撮影地点に速やかに誘導するようにカメラ1を動作させる。尚、地点の特定、地図表示、ルート案内等の具体的な処理手順は、一般的なカーナビゲーションシステムで採用している処理手順と同等であるため、詳細な説明は省略する。

【0029】データ購入プログラムは、前記端末18を経由することなく、データ提供サーバ26と直接データ購入契約を交し、かつ、データ提供サーバ26から直接撮影地点データおよび撮影条件データを受信するようにカメラ1を動作させるためのもので、具体的な処理手順は後述する。

【0030】撮影条件設定プログラムは、記憶部5に登録される撮影条件データに基づいて撮影条件（シャッタ速度、絞り、焦点距離およびストロボ条件）を自動的に調整するようにカメラ1を動作させるためのものである。所定の撮影地点に対応する撮影条件は、一つに限定されるべきものではなく、撮影地点毎に複数の撮影条件を用意し、天候、撮影時間等に応じて任意に選択できるようにすることが望ましい。また、撮影条件は、カメラ1の設定だけでなく、撮影者の立つ位置、カメラ1の構え方、構図等に及んでもよい。また、カメラ1がデジタルカメラ方式である場合には、デジタル画像データの画像処理条件等を撮影条件データに含めることができる。

【0031】図8は撮影地点誘導サービスシステムの構成を示すブロック図である。この図に示されるように、撮影地点誘導サービスシステム30（撮影条件設定サービスシステム兼用）は、前述したカメラ1、端末18、基地局22、インターネット23およびデータ提供サーバ26に加え、前記CD-ROM28や写真集29を発行（販売）するラボ31を備えて構成される。データ提供サーバ26は、WEBサーバを構成するためのハードウェアおよびソフトウェアを備えており、端末18に対しては、地図による撮影地点の絞り込み検索機能、キーワードによる撮影地点の絞り込み検索機能、選択した撮

影地点データの購入契約機能、契約済データのダウンロード機能等を提供し、カメラ1に対しては、カメラ1からの現在地点情報を受信し、その近傍に存在する撮影地点を知らせるセールス機能、カメラ1から購入の意志を示す応答があった場合に購入契約を成立させる機能、契約済データのダウンロード機能等を提供する。

【0032】図9はデータ提供サーバのデータベース構成を示すブロック図である。この図に示されるように、データ提供サーバ26のデータベース32は、少なくとも顧客データベース32a、撮影地点データベース32b、撮影条件データベース32c、撮影画像データベース32dおよび料金データベース32eを備えて構成される。つまり、撮影地点データ、撮影条件データおよび撮影画像データ（サンプル画像）は、原則として有料で提供されるが、関連する物品（カメラ、フィルム等）やサービス（DPE等）の販売、データ提供サーバ26への広告掲載等で収益を得ることにより、全てのデータもしくは一部のデータを無料で提供するようにしてもよい。また、撮影地点データ、撮影条件データおよび撮影画像データを顧客もしくは第三者から提供してもらい、収益の一部をデータ提供者に配当する機能を付加してもよい。

【0033】図10はカメラのモニタ表示例を示す説明図である。この図に示されるように、撮影地点誘導時においては、カメラ1のモニタ11に地図が表示され、該地図上に、予め登録した撮影地点のマーク33、撮影条件データが登録されていることを示すサイン34、カメラ1の現在地点を示すマーク35等が表示される。また、現在地点の近くに新たな撮影地点がある場合、データ提供サーバ26からのセールス信号に基づいて販売通知用のサイン36が画面上に表示される。以下、データ提供サーバ26からセールス信号を受信した場合におけるカメラ1の音声ガイドおよび撮影者によるカメラ操作の例を示す。

【0034】カメラ：セールス信号受信、サイン36をモニタ11に表示

カメラ：「近くに、よい撮影スポットがあります。」

（音声ガイド）

カメラ：「サンプルの画像データをお送りしますか？」

（音声ガイド）

撮影者：サンプル画像要求（カメラ操作）

カメラ：「サンプル画像送信要求を受け付けました。料金は100円です。」

カメラ：モニタ11にサンプル画像を表示

カメラ：「サンプル画像の表示が完了しました。」（音声ガイド）

カメラ：「撮影地点情報を購入しますか？」（音声ガイド）

撮影者：撮影地点情報を購入（カメラ操作）

カメラ：「注文を受け付けました。撮影地点を表示しま

す。料金は100円です。」（音声ガイド）

カメラ：モニタ11に撮影地点のマーク33を表示

カメラ：「撮影地点の表示が完了しました。」（音声ガイド）

カメラ：「撮影条件情報は、いかがですか？」（音声ガイド）

撮影者：撮影条件情報を購入（カメラ操作）

カメラ：「注文を受け付けました。撮影条件を送信します。料金は50円です。」（音声ガイド）

カメラ：モニタ11に撮影条件の存在を示すサイン34を表示。

【0035】図11は端末に対してデータ販売を行う場合におけるデータ提供サーバの処理手順を示すフローチャートである。この図に示されるように、端末画面には、例えば日本地図が表示され、東北、北陸等のエリアが示される。顧客が「東北エリア」を選択すると、次に県を選択する画面が表示され、顧客が仮に「山形県」を選択すると、山形県の地図が表示される。ここで撮影画像サンプルを選択すると、複数の景観が表示され、これで撮影旅行地域設定（ステップ101）および販売撮影地点情報表示（ステップ102）が終了する。

【0036】次に、画面表示されている複数の景観の中から、顧客が特定の景観を選択すると、「撮影地点情報を購入しますか？」というメッセージが画面表示される。ここで顧客の購入ボタン操作を判断（ステップ103）すると、料金が画面表示（ステップ104）され、さらに「本当に撮影地点情報を購入しますか？」というメッセージが画面表示される。顧客が確認ボタンをクリックすると、撮影地点情報が画面表示されると共に、カメラ1に登録するためのデータが送信され（ステップ105）、端末18の記憶部に保存される。

【0037】続いて、撮影地点情報の追加購入を促すメッセージが表示され（ステップ106）、顧客が追加購入を選択した場合には、再び複数の景観が画面表示される（ステップ102）。顧客が追加購入を拒否した場合は、撮影条件情報販売に移る（ステップ107）。尚、撮影条件情報販売の処理手順は、撮影地点情報販売の場合と略同一であるため、詳細な説明は省略する。

【0038】叙述の如く構成された本発明の実施の形態において、カメラ1は、撮影地点データを登録する機能と、該撮影地点データに基づいて所定の撮影地点に撮影者を誘導する機能とを備える。つまり、撮影旅行をする場合に、データ提供サーバ26、CD-ROM28、或いは写真集29で提供される撮影地点データを予めカメラ1に登録すれば、一般の撮影者であっても、プロのカメラマンのみが知り得るような絶好の撮影地点で写真撮影を行うことができるばかりでなく、その撮影地点に迅速かつ確実に到達することが可能になり、しかも、撮影者に対する撮影地点データの提供をビジネスとして成立させることができる。また、前記撮影地点誘導手段は、

カーナビゲーションシステムの如き広範囲の移動を想定する必要が無く、特定した撮影地点の周辺地域における地図等のデータを取り扱えば良く、コンパクトなシステムにて提供できる利点がある。

【0039】また、カメラ1は、所定の撮影地点に対応した撮影条件データを登録する機能と、該撮影条件データに基づいて所定の撮影条件をカメラ1に設定する機能とを備えるため、その撮影地点における最適な撮影条件で写真撮影を行うことができるばかりでなく、撮影条件の設定ミスによる撮影の失敗を防止することができ、しかも、撮影者に対する撮影条件データの提供をビジネスとして成立させることができる。

【0040】また、カメラ1は、データ提供サーバ26が接続されるインターネット23に対し、有線もしくは無線状態で接続可能であって、データ提供サーバ26が送信した撮影地点データおよび撮影条件データを受信して記憶部5に登録するため、地域的な制約を受けることなく、撮影地点データおよび撮影条件データを取得することができ、しかも、カメラ1自身がインターネット接続機能を備えることにより、撮影旅行中においても、撮影地点データおよび撮影条件データを適宜購入することができるようになり、その結果、撮影地点データや撮影条件データの登録忘れや、旅行先の変更等に容易に対応できるばかりでなく、途中に存在する絶好の撮影地点を見逃す失敗を防ぐことができる。

【0041】また、カメラ1は、インターネット23を介してデータ提供サーバ26に接続される端末18に対し、有線もしくは無線状態で接続可能であって、データ提供サーバ26が送信した撮影地点データおよび撮影条件データを端末18経由で受信して記憶部5に登録するため、地域的な制約を受けることなく、撮影地点データおよび撮影条件データを取得することができ、特に、データ提供サーバ26は、天候や季節などの現地データを受信し、その様な現地状況に最適な撮影条件データを提供することが可能となる。しかも、インターネット接続機能を備えるモバイル端末を携帯すれば、撮影旅行中においても、撮影地点データおよび撮影条件データを適宜購入することができるようになり、その結果、撮影地点データや撮影条件データの登録忘れや、旅行先の変更等に容易に対応できるばかりでなく、途中に存在する絶好の撮影地点を見逃す失敗を防ぐことができる。

【0042】また、カメラ1は、CD-ROM28に格納された撮影地点データおよび撮影条件データを読み取り可能な端末18に対し、有線もしくは無線状態で接続可能であって、CD-ROM28に格納された撮影地点データおよび撮影条件データを端末18経由で受信して記憶部5に登録するため、インターネット接続機能を備えない端末18でも撮影地点データおよび撮影条件データの登録を行うことができ、しかも、CD-ROMドライブ27を備えるモバイル端末を携帯すれば、撮影旅行

中においても、撮影地点データおよび撮影条件データを適宜登録することができるようになり、その結果、撮影地点データや撮影条件データの登録忘れや、旅行先の変更等に容易に対応できるばかりでなく、途中に存在する絶好の撮影地点を見逃す失敗を防ぐことができる。

【0043】また、カメラ1は、写真集29にバーコード29bとして印刷された撮影地点データおよび撮影条件データを読み取り可能なバーコードリーダ20に対し、有線もしくは無線状態で接続可能であって、写真集29にバーコード29bとして印刷された撮影地点データおよび撮影条件データをバーコードリーダ20経由で受信して記憶部5に登録するため、インターネット23に接続できない状況においても撮影地点データおよび撮影条件データの登録を行うことができ、しかも、写真集29およびバーコードリーダ20を携帯すれば、撮影旅行中においても、撮影地点データおよび撮影条件データを適宜登録することができるようになり、その結果、撮影地点データや撮影条件データの登録忘れや、旅行先の変更等に容易に対応できるばかりでなく、途中に存在する絶好の撮影地点を見逃す失敗を防ぐことができる。

【0044】また、カメラ1は、撮影地点データに基づいて特定した撮影地点と、GPS衛星電波に基づいて特定したカメラ1の現在地点と、両地点を含む地図とをモニタ11上に表示すると共に、モニタ11上の画像または音声によるガイドで撮影者を所定の撮影地点まで誘導するため、カーナビゲーションシステムと同等の精度で撮影者を撮影地点に誘導することができ、その結果、撮影者は、撮影地点に迅速かつ確実に到達することが可能になる。

【0045】

【発明の効果】本発明の撮影地点誘導機能付きカメラは、上記のように構成したことにより、一般の撮影者であっても、プロのカメラマンのみが知り得るような絶好の撮影地点で写真撮影を行うことが可能になるばかりでなく、その撮影地点に迅速かつ確実に到達することができる。

【0046】また、本発明の撮影条件設定機能付きカメラは、上記のように構成したことにより、一般の撮影者であっても、その撮影地点における最適な撮影条件で写真撮影を行うことが可能になるばかりでなく、撮影条件の設定ミスによる撮影の失敗を防止することができる。

【0047】また、本発明の撮影地点誘導サービスシステムは、上記のように構成したことにより、一般の撮影者であっても、プロのカメラマンのみが知り得るような絶好の撮影地点で写真撮影を行うことが可能になるばかりでなく、その撮影地点に迅速かつ確実に到達することができ、しかも、撮影者に対する撮影地点データの提供をビジネスとして成立させることができる。

【0048】また、本発明の撮影条件設定サービスシステムは、上記のように構成したことにより、一般の撮影

者であっても、その撮影地点における天候や季節など現地環境を加味した最適な撮影条件によって写真撮影を行うことが可能になるばかりでなく、撮影条件の設定ミスによる撮影の失敗を防止することができ、しかも、撮影者に対する撮影条件データの提供をビジネスとして成立させることができる。

【図面の簡単な説明】

【図1】カメラの背面斜視図である。

【図2】カメラの構成を示すブロック図である。

【図3】GPS受信部および無線通信部の作用説明図である。

【図4】データ提供サーバのデータをモバイルコンピュータ経由でカメラに登録する場合の説明図である。

【図5】データ提供サーバのデータをセルフオペレーション端末経由でカメラに登録する場合の説明図である。

【図6】CD-ROMのデータをデスクトップコンピュータ経由でカメラに登録する場合の説明図である。

【図7】写真集のデータをバーコードリーダー経由でカメラに登録する場合の説明図である。

【図8】撮影地点誘導サービスシステムの構成を示すブロック図である。

【図9】データ提供サーバのデータベース構成を示すブロック図である。

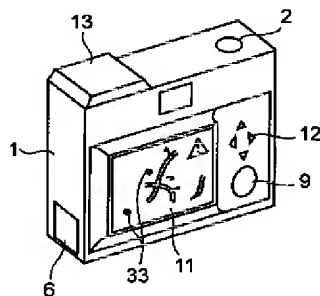
【図10】カメラのモニタ表示例を示す説明図である。

【図11】端末に対してデータ販売を行う場合におけるデータ提供サーバの処理手順を示すフローチャートである。

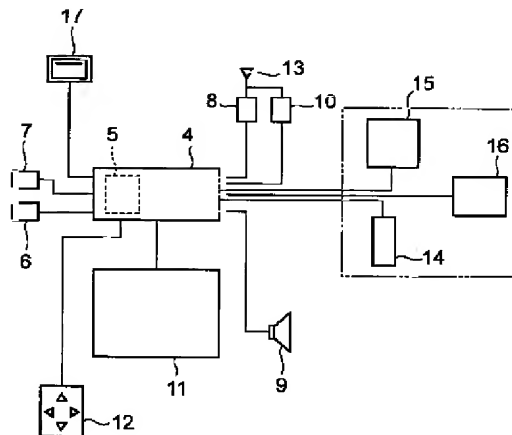
【符号の説明】

- 1 カメラ
- 4 制御ユニット
- 5 記憶部
- 6 ケーブル接続部
- 7 赤外線通信部
- 8 GPS受信部
- 9 スピーカ
- 10 無線通信部
- 11 モニタ
- 12 操作スイッチ
- 13 アンテナ
- 14 シャッター速度調整ユニット
- 15 絞り調整ユニット
- 16 ズーム調整ユニット
- 17 ストロボ
- 18 端末
- 19 ケーブル
- 20 バーコードリーダー
- 23 インターネット
- 26 データ提供サーバ
- 28 CD-ROM
- 29 写真集
- 29b バーコード
- 30 撮影地点誘導サービスシステム
- 32 データベース

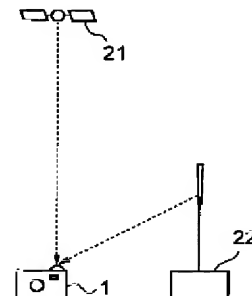
【図1】



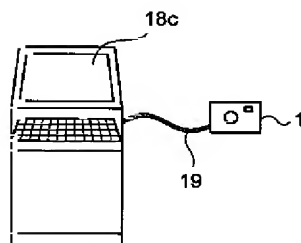
【図2】



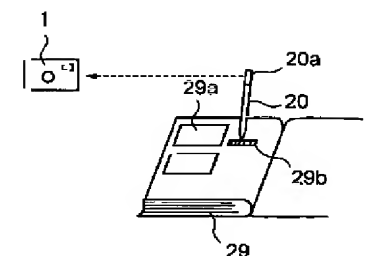
【図3】



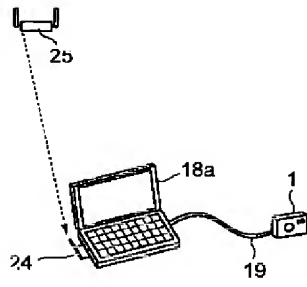
【図5】



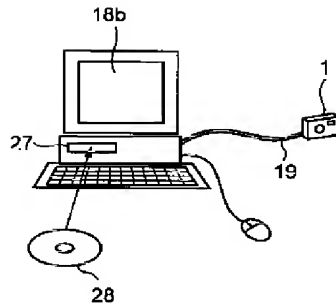
【図7】



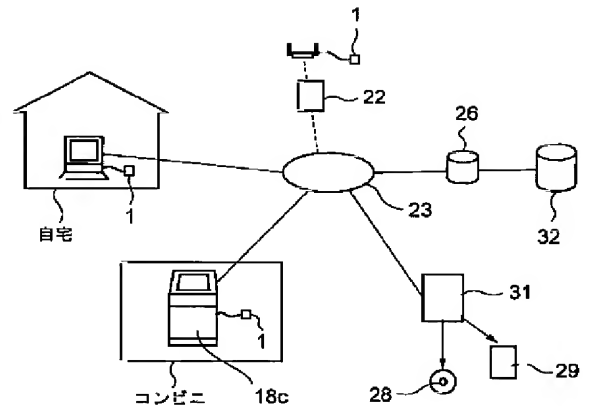
【図4】



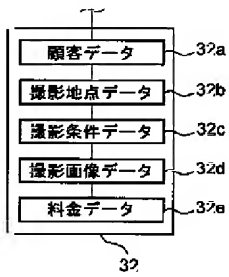
【図6】



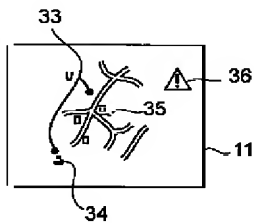
【図8】



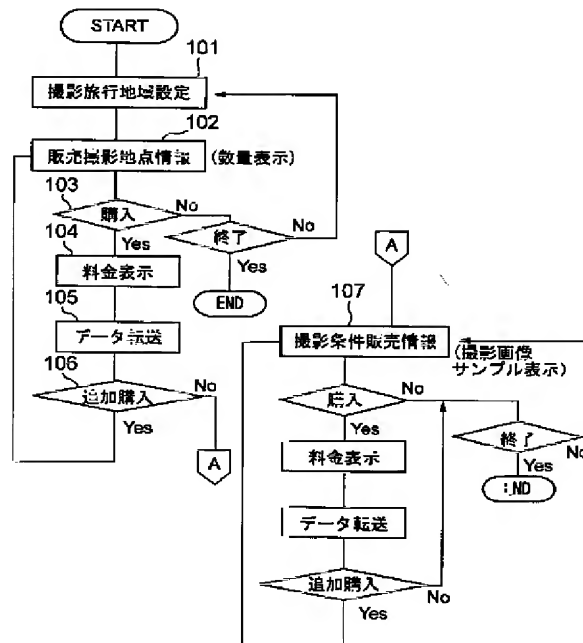
【図9】



【図10】



【図11】



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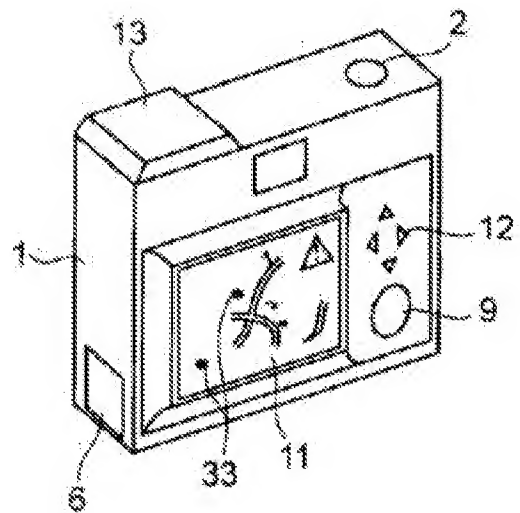
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(54) CAMERA WITH PHOTOGRAPHY SPOT GUIDING FUNCTION AND PHOTOGRAPHIC CONDITION SETTING FUNCTION, AND PHOTOGRAPHY SPOT GUIDANCE AND PHOTOGRAPHIC CONDITION SETTING SERVICE SYSTEM

(57)Abstract:

PROBLEM TO BE SOLVED: To enable even a general photographer to take a picture at the best photography spot that only a professional cameraman is able to know and also to speedily and surely move to the photography spot and to actualize the business of providing photography spot data for photographers.

SOLUTION: The camera 1 is equipped with a function of registering photography spot data and a function of guiding a photographer to a specific photography spot according to the photography spot data, and the photography spot data are provided by using a data providing server 26, a CD-ROM 28, or a collection of photographs 29.



TECHNICAL FIELD

[Field of the Invention] The camera which has a filming site point derivation function in which this invention derives a photography person to a predetermined filming site point, and a photographing condition setting up function which sets the photographing condition corresponding to a predetermined filming site point as a camera, Or it is related with the filming site point derivation and the photographing condition setting-out service system which comprise

a data providing server which provides filming site point data and photographing condition data, and two or more cameras which have said function.

EFFECT OF THE INVENTION

[Effect of the Invention] Even if the cameras with a filming site point derivation function of this invention are ordinary photography persons by having constituted as mentioned above, it not only becomes possible to take a photograph at the capital filming site point which only a pro's cameraman can know, but they can reach the filming site point promptly and certainly.

[0046] Even if the cameras with a photographing condition setting up function of this invention are ordinary photography persons by having constituted as mentioned above, it not only becomes possible to take a photograph by the optimal photographing condition in the filming site point, but they can prevent failure of photography by the setting error of a photographing condition.

[0047] The filming site point derivation service system of this invention, It not only becomes possible to take a photograph at the capital filming site point which only a pro's cameraman can know, even if it is ordinary photography persons by having constituted as mentioned above, but, The filming site point can be reached promptly and certainly, and, moreover, offer of the filming site point data to a photography person can be formed as business.

[0048] The photographing condition setting-out service system of this invention, It not only becomes possible to take a photograph according to the optimal photographing condition that considered local environment, such as the weather, a season, etc. in the filming site point, even if it is ordinary photography persons by having constituted as mentioned above, but, Failure of photography by the setting error of a photographing condition can be prevented, and, moreover, offer of the photographing condition data to a photography person can be formed as business.

TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] It was originated that the problem like the above should be swept away and this invention is ****. Even if the purpose is a photography person, it is it not only becoming possible to take a photograph at the capital filming site point which only a pro's cameraman can know, but providing the camera with a filming site point derivation function which can reach the filming site point promptly and certainly.

[0007] Even if other purposes of 1 are ordinary photography persons, there are in it not only becoming possible to take a photograph by the optimal photographing condition in the filming site point, but providing the camera with a photographing condition setting up function which can prevent failure of photography by the setting error of a photographing condition.

[0008] Other purposes of 1 it not only becomes possible to take a photograph at the capital filming site point which only a pro's cameraman can know, even if it is ordinary photography persons, but, The filming site point can be reached promptly and certainly, and it is in moreover providing the filming site point derivation service system which can form offer of the filming site point data to a photography person as business.

[0009] Other purposes of 1 it not only becomes possible to take a photograph according to the optimal photographing condition that considered local environment, such as the weather, a season, etc. in the filming site point, even if it is ordinary photography persons, but, Failure of photography by the setting error of a photographing condition can be prevented, and it is in

moreover providing the photographing condition setting-out service system which can form offer of the photographing condition data to a photography person as business.

MEANS

[Means for Solving the Problem] This invention is characterized by a camera with a filming site point derivation function comprising the following, in order to solve an aforementioned problem.
A data registering means which registers filming site point data.

A filming site point guiding means which derives a photography person to a predetermined filming site point based on this filming site point data.

[0011] This invention is characterized by a camera with a photographing condition setting up function comprising the following again, in order to solve an aforementioned problem.

A data registering means which registers photographing condition data corresponding to a predetermined filming site point.

A photographing condition setting-out means to set a predetermined photographing condition as a camera based on this photographing condition data.

[0012] In order that this invention may solve an aforementioned problem, a filming site point derivation service system of this invention is characterized by that a filming site point derivation service system containing a data providing server and two or more cameras comprises:

A data registering means into which said data providing server has a data providing means which provides filming site point data, and said camera registers said filming site point data.

A filming site point guiding means which derives a photography person to a predetermined filming site point based on this filming site point data.

[0013] In order that this invention may solve an aforementioned problem, a photographing condition setting-out service system of this invention is characterized by that a photographing condition setting-out service system containing a data providing server and two or more cameras comprises:

A data registering means into which said data providing server has a data providing means which provides photographing condition data corresponding to a predetermined filming site point, and said camera registers said photographing condition data.

A photographing condition setting-out means to set a predetermined photographing condition as a camera based on this photographing condition data.

[0014]

[Embodiment of the Invention] Hereafter, the camera which illustrates an embodiment of the invention as a suitable embodiment is explained in detail based on Drawings. Drawing 1 is a back perspective view of a camera. As shown in this figure, the camera 1 is provided with the shutter button 2 and the camera base element of finder 3 grade, and is constituted. As a photographing system of the camera 1, although a digital camera method or analog camera systems are adopted, in the point of obtaining a more beautiful photograph, it is desirable that they are the analog camera systems using a silver halide photosensitive material.

[0015] Drawing 2 is a block diagram showing the composition of a camera. The camera 1 is

provided with the control unit 4 which comprises a CPU, RAM, a ROM, etc. as shown in this figure. The storage parts store 5 which is a component of a data registering means at the control unit 4, The cable splicing section 6 which is a component of a data registering means, and the infrared ray communication section 7 which is the components of a data registering means, GPS transmitting and receiving part 8 which is a component of a filming site point guiding means, and the loudspeaker 9 which is the components of a data registering means, a filming site point guiding means, and a data purchase means, The Radio Communications Department 10 which is a component of a data registering means, and the monitor 11 which is the components of a data registering means, a filming site point guiding means, and a data purchase means, The operation switch 12 which is a component of a data registering means, a filming site point guiding means, and a data purchase means, The antenna 13 which is a component of a data registering means and a filming site point guiding means, The shutter speed adjusting unit 14 which is a component of a photographing condition setting-out means, the diaphragm adjustment unit 15 which is the components of a photographing condition setting-out means, the zooming adjustment unit 16 which is the components of a photographing condition setting-out means, and the stroboscope 17 which is the components of a photographing condition setting-out means are connected. A data registration program which is a component of a data registering means at ROM of the control unit 4, The filming site point derivation program which is a component of a filming site point guiding means, the data purchase program which is the components of a data purchase means, and the photographing condition setting program which is the components of a photographing condition setting-out means are stored beforehand. That is, a data registering means is constituted using the storage parts store 5, the cable splicing section 6, the infrared ray communication section 7, the loudspeaker 9, the Radio Communications Department 10, the monitor 11, the operation switch 12, the antenna 13, a data registration program, etc., A filming site point guiding means is constituted using GPS transmitting and receiving part 8, the loudspeaker 9, the monitor 11, the operation switch 12, the antenna 13, a filming site point derivation program, etc., The system configuration of the data purchase means is carried out using the loudspeaker 9, the monitor 11, and the data purchase program that carries out coordinated operation of the operation switch 12 grade, and it explains the details of each component one by one hereafter.

[0016] Are for the storage parts store 5 memorizing filming site point data and photographing condition data, and to filming site point data. The latitude data of a filming site point, longitude information, etc. are contained, and the shutter speed adjustment data corresponding to each filming site point, diaphragm adjustment data, zooming adjustment data, stroboscope adjustment data, etc. are contained in photographing condition data.

[0017] The cable splicing section 6 is for communicating via the terminal 18 and the cable 19 of the mobile computer 18a, the desktop computer 18b, the self operation terminal 18c, etc., and comprises a cable communication port based, for example on the USB standard.

[0018] The infrared ray communication section 7 is for communicating via the terminal 18 and the bar code reader 20 of the mobile computer 18a, the desktop computer 18b, the self operation terminal 18c, etc., and an infrared signal, and comprises a infrared transmission port based, for example on the IrDA standard.

[0019] GPS transmitting and receiving part 8 is for receiving the electric wave of the GPS (Global Positioning System) satellite 21 via the antenna 13, and it becomes possible to specify the its present location point of the camera 1 based on the GPS satellite radio wave which received. As a its present location point specific method of a camera, an electric wave may be

transmitted from a camera, the position information on a camera may be transmitted from a base station based on the position of the antenna which received this electric wave, and methods other than GPS, such as a method of a camera receiving this and specifying its present location point, may be adopted.

[0020] As shown in drawing 3, the Radio Communications Department 10 is for connecting the camera 1 to the Internet 23 via the antenna 13 and the base station 22, and comprises a cellular-phone module and a PHS module, for example.

[0021] The monitor 11 is for displaying a data registration screen, a filming site point derivation screen, a data purchase screen, etc., comprises a liquid crystal display panel, for example, and is formed in the back part of the camera 1. The operation switch 12 is formed near the monitor 11, for example, is operated according to an operation request with monitor display or a sound.

[0022] The shutter speed adjusting unit 14, the diaphragm adjustment unit 15, the zooming adjustment unit 16, and the stroboscope 17 are for adjusting the photographing condition (shutter speed, a diaphragm, a focal distance, and stroboscope conditions) of the camera 1, and enable an automatic regulation of the photographing condition based on said photographing condition data.

[0023] A data registration program The mobile computer 18a, the desktop computer 18b, Filming site point data and photographing condition data are received from the self operation terminal 18c and bar code reader 20 grade, as these received data are registered into the storage parts store 5, it is for operating the camera 1, and various kinds of data registration gestalten are hereafter explained over Drawings.

[0024] Drawing 4 is an explanatory view in the case of registering the data of a data providing server into a camera via a mobile computer. As shown in this figure, the camera 1 is connected to the mobile computer 18a via the cable 19. The mobile computer 18a is connected to the Internet 23 via the radio router (not shown) which is provided with the wireless communication module 24, for example, is provided with the antenna 25. On the Internet 23, the data providing server 26 (WEB server) mentioned later exists, and the mobile computer 18a communicates with the data providing server 26 via a general-purpose browser. On a browser picture, search of a filming site point, a data purchasing contract, etc. are possible, and if a data purchasing contract is finished, download of filming site point data and photographing condition data will be permitted. It is transmitted to the camera 1 via the cable 19, and the filming site point data and photographing condition data which were downloaded to the mobile computer 18a are registered into the storage parts store 5. Data registration can be performed by wireless, without using the cable 19, when the mobile computer 18a is provided with a infrared transmission port.

[0025] Drawing 5 is an explanatory view in the case of registering the data of a data providing server into a camera via a self operation terminal. As shown in this figure, the camera 1 is connected to the self operation terminal 18c installed in a convenience store etc. via the cable 19. The Internet 23 is accessed, for example via a router (not shown), and the self operation terminal 18c communicates with the data providing server 26 via an exclusive browser. On a browser picture, search of a filming site point, a data purchasing contract, etc. are possible, and if a data purchasing contract is finished, download of filming site point data and photographing condition data will be permitted. It is transmitted to the camera 1 via the cable 19, and the filming site point data and photographing condition data which were downloaded to the self operation terminal 18c are registered into the storage parts store 5. Data registration can be performed by wireless, without using the cable 19, when the self operation terminal 18c is provided with a infrared transmission port.

[0026] Drawing 6 is an explanatory view in the case of registering the data of CD-ROM into a

camera via a desktop computer. As shown in this figure, the camera 1 is connected to the desktop computer 18b via the cable 19. The desktop computer 18b is provided with CD-ROM drive 27, and CD-ROM28 purchased beforehand is set. Filming site point data and photographing condition data are stored in CD-ROM28 with two or more sample pictures, filming site point data and photographing condition data selected from them are transmitted to the camera 1 via the cable 19, and it registers with the storage parts store 5. Data registration can be performed by wireless, without using the cable 19, when the mobile computer 18a is provided with a infrared transmission port.

[0027] Drawing 7 is an explanatory view in the case of registering the data of a photograph collection into a camera via a bar code reader. As shown in this figure, filming site point data and photographing condition data are printed as the bar code 29b with two or more scene photographs 29a by the photograph collection 29 purchased beforehand, and the bar code 29b of the scene photograph 29a selected from them is read by the bar code reader 20 to it. It has the infrared ray transmission section 20a, the filming site point data and photographing condition data which were read are transmitted to the camera 1 as an infrared signal, and the bar code reader 20 is registered into the storage parts store 5.

[0028] A filming site point derivation program specifies a filming site point based on the filming site point data registered into the storage parts store 5, and specifies the its present location point of the camera 1 based on a GPS satellite radio wave, and displays a map including both points on the monitor 11. The route from a its present location point to a filming site point is guided with the picture or sound on the monitor 11, and the camera 1 is operated so that a photography person may be promptly derived to a filming site point. Since concrete procedure, such as pinpointing of a point, a map display, and route guidance, is equivalent to the procedure adopted with the common car-navigation system, detailed explanation is omitted.

[0029] A data purchase program exchanges the data providing server 26 and an immediate-data purchasing contract, without going via said terminal 18, And it is for operating the camera 1 so that radiograph point data and photographing condition data may be received from the data providing server 26, and concrete procedure is mentioned later.

[0030] A photographing condition setting program is for operating the camera 1 so that a photographing condition (shutter speed, a diaphragm, a focal distance, and stroboscope conditions) may be automatically adjusted based on the photographing condition data registered into the storage parts store 5. As for the photographing condition corresponding to a predetermined filming site point, it is desirable for it not to be limited to one, to prepare two or more photographing conditions for every filming site point, and to enable it to choose arbitrarily according to the weather, exposure time, etc. A photographing condition may also attain to how to establish the position which stands not only for setting out of the camera 1 but a photography person, and the camera 1, composition, etc. When the camera 1 is a digital camera method, the image processing condition of digital image data, etc. can be included in photographing condition data.

[0031] Drawing 8 is a block diagram showing the composition of a filming site point derivation service system. As shown in this figure, the filming site point derivation service system 30 (photographing condition setting-out service system combination), In addition to the camera 1, the terminal 18, the base station 22, the Internet 23, and the data providing server 26 which were mentioned above, it has the lab 31 which publishes said CD-ROM28 and the photograph collection 29 (sale), and is constituted. The data providing server 26 is provided with the hardware and software for constituting a WEB server, and the terminal 18 is received, The

narrowing retrieval function of a filming site point with a map, the narrowing retrieval function of the filming site point by a keyword, Provide the purchasing contract function of selected filming site point data, the download function of contracted data, etc., and the camera 1 is received, The their present location dot data from the camera 1 are received, and when there are a sales function to tell the filming site point which exists in the neighborhood, and a response which shows the volition of purchase from the camera 1, the function to conclude a purchasing contract, the download function of contracted data, etc. are provided.

[0032] Drawing 9 is a block diagram showing the database organization of a data providing server. As shown in this figure, the database 32 of the data providing server 26 is provided with the customer database 32a, the filming site point database 32b, the photographing condition database 32c, the taken image database 32d, and the fare data base 32e at least, and is constituted. That is, although filming site point data, photographing condition data, and photographed image data (sample picture) are provided for pay in principle, It may be made to provide all the data or some data for nothing by acquiring a profit by sale of related articles (a camera, a film, etc.) or services (DPE etc.), advertising printing to the data providing server 26, etc. I have filming site point data, photographing condition data, and photographed image data provided from a customer or a third party, and the function which pays a part of profit to a data donor may be added.

[0033] Drawing 10 is an explanatory view showing the example of a monitor display of a camera. As shown in this figure, at the time of filming site point derivation, a map is displayed on the monitor 11 of the camera 1, and the mark 35 grade which shows the mark 33 of the filming site point beforehand registered on this map, the sign 34 which shows that photographing condition data is registered, and the its present location point of the camera 1 is displayed. When a new filming site point is near the its present location point, based on the sales signal from the data providing server 26, the sign 36 for the notice of sales is displayed on a screen. Hereafter, the example of the camera operation by the voice guide and photography person of the camera 1 at the time of receiving a sales signal from the data providing server 26 is shown.

[0034] camera: -- sales signal reception and the sign 36 -- the monitor 11 -- display camera: "a good photography spot is in the neighborhood." (voice guide)

Camera : "do I send the image data of a sample?" (voice guide)

Photography person: Sample picture demand (camera operation)

Camera: "the sample picture Request to Send was received. A fee is 10 yen. "

Camera: It is a sample picture to the monitor 11 Display camera: "the display of the sample picture was completed." (voice guide)

Camera : "are filming site dot data purchased?" (voice guide)

Photography person: Purchase filming site dot data (camera operation).

Camera: "the order was accepted. A filming site point is displayed. A fee is 100 yen. " (voice guide)

Camera: It is the mark 33 of a filming site point to the monitor 11 Display camera: "the display of the filming site point was completed." (voice guide)

Camera : "how is photographing condition information?" (voice guide)

Photography person: Purchase photographing condition information (camera operation).

Camera: "the order was accepted. A photographing condition is transmitted. A fee is 50 yen. " (voice guide)

Camera: Display the sign 34 which shows existence of a photographing condition to the monitor 11.

[0035] Drawing 11 is a flow chart which shows the procedure of the data providing server in the case of making a data sale to a terminal. As shown in this figure, a Japanese map is displayed on a terminal screen, for example, and area, such as a northeast and Hokuriku, is shown in it. If the screen which will choose a prefecture next if a customer chooses "northeast area" is displayed and a customer chooses "Yamagata Prefecture", the map of Yamagata Prefecture is displayed. If a taken image sample is chosen here, two or more scenes will be displayed and photography travel area setting out (Step 101) and a sales filming site dot-data display (Step 102) will be completed now.

[0036] Next, if a customer chooses a specific scene from two or more scenes by which a screen display is carried out, a screen display of the message "whether filming site dot data are purchased" will be carried out. If a customer's buy button operation is judged here (Step 103), a screen display (Step 104) of the fee will be carried out, and a screen display of the message "whether filming site dot data are purchased to this [this] " will be carried out further. If a customer clicks a confirmation button, a screen display of the filming site dot data will be carried out, and the data for registering with the camera 1 is transmitted (Step 105), and it is saved at the storage parts store of the terminal 18.

[0037] Then, when the message to which the additional purchase of filming site dot data is urged is displayed (Step 106) and a customer chooses an additional purchase, a screen display of two or more scenes is carried out again (Step 102). When a customer refuses an additional purchase, it shifts to photographing condition information sale (Step 107). Since the procedure of photographing condition information sale is the same in the case of filming site dot-data sale, and abbreviation, detailed explanation is omitted.

[0038] In the constituted embodiment of the invention, the camera 1 is provided with the following like description.

The function to register filming site point data.

The function to derive a photography person to a predetermined filming site point based on this filming site point data.

That is, if the filming site point data provided by the data providing server 26, CD-ROM28, or the photograph collection 29 is beforehand registered into the camera 1 when taking a photography trip, It not only can take a photograph at the capital filming site point which only a pro's cameraman can know, but [even if it is ordinary photography persons,] , It can become possible to reach the filming site point promptly and certainly, and, moreover, offer of the filming site point data to a photography person can be formed as business. What is necessary is for said filming site point guiding means not to have the necessity of assuming wide range movement like a car-navigation system, and just to deal with the data of the map in the surrounding area of the specified filming site point, etc., and there is an advantage which can be provided by a compact system.

[0039] Since the camera 1 is provided with the function to register the photographing condition data corresponding to a predetermined filming site point, and the function to set a predetermined photographing condition as the camera 1 based on this photographing condition data, It can prevent failure of photography by the setting error of a photographing condition, and, moreover, it not only can take a photograph by the optimal photographing condition in the filming site point, but can form offer of the photographing condition data to a photography person as business.

[0040] The camera 1 receives the Internet 23 to which the data providing server 26 is connected, In order to receive the filming site point data and photographing condition data which connection

by the cable or a wireless state was possible, and the data providing server 26 transmitted and to register with the storage parts store 5, Without receiving local restrictions, can acquire filming site point data and photographing condition data, and moreover, when camera 1 self is provided with an Internet connectivity function, During a photography travel, filming site point data and photographing condition data can be suitably purchased now, As a result, failure which it not only can respond to a registration failure of filming site point data and photographing condition data, change of a travel destination, etc. easily, but overlooks the capital filming site point which exists in the middle can be prevented.

[0041] The camera 1 receives the terminal 18 connected to the data providing server 26 via the Internet 23, In order to receive the filming site point data and photographing condition data which connection by the cable or a wireless state was possible, and the data providing server 26 transmitted by terminal 18 course and to register with the storage parts store 5, Without receiving local restrictions, filming site point data and photographing condition data are acquirable, and especially the data providing server 26 receives the local data of the weather, a season, etc., and it becomes possible to provide the optimal photographing condition data for such a local situation. And if a mobile terminal provided with an Internet connectivity function is carried, During a photography travel, filming site point data and photographing condition data can be suitably purchased now, As a result, failure which it not only can respond to a registration failure of filming site point data and photographing condition data, change of a travel destination, etc. easily, but overlooks the capital filming site point which exists in the middle can be prevented.

[0042] The camera 1 receives the terminal 18 which can read the filming site point data and photographing condition data which were stored in CD-ROM28, In order to receive filming site point data and photographing condition data possible [by the cable or a wireless state] and stored in CD-ROM28 by terminal 18 course and to register with the storage parts store 5, If the mobile terminal which can perform registration of filming site point data and photographing condition data, and is moreover provided with CD-ROM drive 27 also at the terminal 18 which is not provided with an Internet connectivity function is carried, During a photography travel, filming site point data and photographing condition data can be suitably registered now, As a result, failure which it not only can respond to a registration failure of filming site point data and photographing condition data, change of a travel destination, etc. easily, but overlooks the capital filming site point which exists in the middle can be prevented.

[0043] The camera 1 receives the bar code reader 20 which can read the filming site point data and photographing condition data which were printed by the photograph collection 29 as the bar code 29b, In order to receive the filming site point data and photographing condition data which connection by the cable or a wireless state was possible, and were printed by the photograph collection 29 as the bar code 29b by bar code reader 20 course and to register with the storage parts store 5, If registration of filming site point data and photographing condition data can be performed also in the situation which is not connectable with the Internet 23 and the photograph collection 29 and the bar code reader 20 are moreover carried, During a photography travel, filming site point data and photographing condition data can be suitably registered now, As a result, failure which it not only can respond to a registration failure of filming site point data and photographing condition data, change of a travel destination, etc. easily, but overlooks the capital filming site point which exists in the middle can be prevented.

[0044] The camera 1 displays the filming site point specified based on filming site point data, the its present location point of the camera 1 specified based on the GPS satellite radio wave, and a map including both points on the monitor 11, and. In order to derive a photography person to a

predetermined filming site point in a guide with the picture or sound on the monitor 11, a photography person can be derived to a filming site point in accuracy equivalent to a car-navigation system, and, as a result, it enables a photography person to reach a filming site point promptly and certainly.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] The camera which has a filming site point derivation function in which this invention derives a photography person to a predetermined filming site point, and a photographing condition setting up function which sets the photographing condition corresponding to a predetermined filming site point as a camera, Or it is related with the filming site point derivation and the photographing condition setting-out service system which comprise a data providing server which provides filming site point data and photographing condition data, and two or more cameras which have said function.

[0002]

[Description of the Prior Art] Generally, photography of a beautiful scene is set as the main purpose, and many photography travelers who travel by possessing a camera exist. There are not few such photography travelers, also when obliged [it becoming a cause to have seen the beautiful scene's with a photograph collection's, a shell folder, etc., and not acquiring the detailed knowledge about the route to a scene] to action. For this reason, a photography traveler may finish with the result that much useless time was not able to be spent in order to arrive at the target scene point, or it was not able to arrive at the target scene point etc. Even if it is able to arrive at the scene point made into the purpose fortunately, it may be said that the season differed from time and it differed from the scene currently visualized. It may be said that he gets to know existence of other scenes which were not published on account of space after that, and repents of it.

[0003] In recent years, the number of the young woman who makes photography a hobby, or old persons is increasing. As for this, it is considered to be one factor that development of means of transportation, such as a railroad, enabled it to arrive at destinations, such as a tourist resort, for a short time. By the weight saving of the camera itself, automation, and highly efficient-ization of a photographic film, even if it is a beginner, it is also considered to be a major factor that a beautiful photograph can be taken now.

[0004] However, unless the details are clarified, only by seeing with a photograph collection, a shell folder, etc., capital filming site points which only a pro's cameraman can know, for example are difficult to discover the scene point, and everyone cannot photo them easily. It is assumed that the photograph which the pro's cameraman took looks at the photograph done even if it is more beautifully finished by photographing technology, such as setting (setting out of a photographing condition) of a camera, in many cases and took a photograph at the same point, and it is disappointed.

[0005] Then, although it is possible to sell the knowledge of the filming site point and photographing condition which a pro's cameraman etc. have (offer), In the former, the actual condition was that there is only the method of publishing a filming site point and photographing conditions (a camera model, shutter speed setting out, diaphragm setting out, etc.) to a photograph collection etc., it cannot be referred to as enough [for the side which he buys only

with this also for the side to sell] , and is not enacted as business.

[0006]

[Problem(s) to be Solved by the Invention] It was originated that the problem like the above should be swept away and this invention is ****. Even if the purpose is a photography person, it is not only becoming possible to take a photograph at the capital filming site point which only a pro's cameraman can know, but providing the camera with a filming site point derivation function which can reach the filming site point promptly and certainly.

[0007] Even if other purposes of 1 are ordinary photography persons, there are in it not only becoming possible to take a photograph by the optimal photographing condition in the filming site point, but providing the camera with a photographing condition setting up function which can prevent failure of photography by the setting error of a photographing condition.

[0008] Other purposes of 1 it not only becomes possible to take a photograph at the capital filming site point which only a pro's cameraman can know, even if it is ordinary photography persons, but, The filming site point can be reached promptly and certainly, and it is in moreover providing the filming site point derivation service system which can form offer of the filming site point data to a photography person as business.

[0009] Other purposes of 1 it not only becomes possible to take a photograph according to the optimal photographing condition that considered local environment, such as the weather, a season, etc. in the filming site point, even if it is ordinary photography persons, but, Failure of photography by the setting error of a photographing condition can be prevented, and it is in moreover providing the photographing condition setting-out service system which can form offer of the photographing condition data to a photography person as business.

[0010]

[Means for Solving the Problem] This invention is characterized by a camera with a filming site point derivation function comprising the following, in order to solve an aforementioned problem. A data registering means which registers filming site point data.

A filming site point guiding means which derives a photography person to a predetermined filming site point based on this filming site point data.

[0011] This invention is characterized by a camera with a photographing condition setting up function comprising the following again, in order to solve an aforementioned problem.

A data registering means which registers photographing condition data corresponding to a predetermined filming site point.

A photographing condition setting-out means to set a predetermined photographing condition as a camera based on this photographing condition data.

[0012] In order that this invention may solve an aforementioned problem, a filming site point derivation service system of this invention is characterized by that a filming site point derivation service system containing a data providing server and two or more cameras comprises:

A data registering means into which said data providing server has a data providing means which provides filming site point data, and said camera registers said filming site point data.

A filming site point guiding means which derives a photography person to a predetermined filming site point based on this filming site point data.

[0013] In order that this invention may solve an aforementioned problem, a photographing

condition setting-out service system of this invention is characterized by that a photographing condition setting-out service system containing a data providing server and two or more cameras comprises:

A data registering means into which said data providing server has a data providing means which provides photographing condition data corresponding to a predetermined filming site point, and said camera registers said photographing condition data.

A photographing condition setting-out means to set a predetermined photographing condition as a camera based on this photographing condition data.

[0014]

[Embodiment of the Invention] Hereafter, the camera which illustrates an embodiment of the invention as a suitable embodiment is explained in detail based on Drawings. Drawing 1 is a back perspective view of a camera. As shown in this figure, the camera 1 is provided with the shutter button 2 and the camera base element of finder 3 grade, and is constituted. As a photographing system of the camera 1, although a digital camera method or analog camera systems are adopted, in the point of obtaining a more beautiful photograph, it is desirable that they are the analog camera systems using a silver halide photosensitive material.

[0015] Drawing 2 is a block diagram showing the composition of a camera. The camera 1 is provided with the control unit 4 which comprises a CPU, RAM, a ROM, etc. as shown in this figure. The storage parts store 5 which is a component of a data registering means at the control unit 4, The cable splicing section 6 which is a component of a data registering means, and the infrared ray communication section 7 which is the components of a data registering means, GPS transmitting and receiving part 8 which is a component of a filming site point guiding means, and the loudspeaker 9 which is the components of a data registering means, a filming site point guiding means, and a data purchase means, The Radio Communications Department 10 which is a component of a data registering means, and the monitor 11 which is the components of a data registering means, a filming site point guiding means, and a data purchase means, The operation switch 12 which is a component of a data registering means, a filming site point guiding means, and a data purchase means, The antenna 13 which is a component of a data registering means and a filming site point guiding means, The shutter speed adjusting unit 14 which is a component of a photographing condition setting-out means, the diaphragm adjustment unit 15 which is the components of a photographing condition setting-out means, the zooming adjustment unit 16 which is the components of a photographing condition setting-out means, and the stroboscope 17 which is the components of a photographing condition setting-out means are connected. A data registration program which is a component of a data registering means at ROM of the control unit 4, The filming site point derivation program which is a component of a filming site point guiding means, the data purchase program which is the components of a data purchase means, and the photographing condition setting program which is the components of a photographing condition setting-out means are stored beforehand. That is, a data registering means is constituted using the storage parts store 5, the cable splicing section 6, the infrared ray communication section 7, the loudspeaker 9, the Radio Communications Department 10, the monitor 11, the operation switch 12, the antenna 13, a data registration program, etc., A filming site point guiding means is constituted using GPS transmitting and receiving part 8, the loudspeaker 9, the monitor 11, the operation switch 12, the antenna 13, a filming site point derivation program, etc., The system configuration of the data purchase means is carried out using the loudspeaker 9, the monitor 11, and the data purchase program that carries out

coordinated operation of the operation switch 12 grade, and it explains the details of each component one by one hereafter.

[0016] Are for the storage parts store 5 memorizing filming site point data and photographing condition data, and to filming site point data. The latitude data of a filming site point, longitude information, etc. are contained, and the shutter speed adjustment data corresponding to each filming site point, diaphragm adjustment data, zooming adjustment data, stroboscope adjustment data, etc. are contained in photographing condition data.

[0017] The cable splicing section 6 is for communicating via the terminal 18 and the cable 19 of the mobile computer 18a, the desktop computer 18b, the self operation terminal 18c, etc., and comprises a cable communication port based, for example on the USB standard.

[0018] The infrared ray communication section 7 is for communicating via the terminal 18 and the bar code reader 20 of the mobile computer 18a, the desktop computer 18b, the self operation terminal 18c, etc., and an infrared signal, and comprises a infrared transmission port based, for example on the IrDA standard.

[0019] GPS transmitting and receiving part 8 is for receiving the electric wave of the GPS (Global Positioning System) satellite 21 via the antenna 13, and it becomes possible to specify the its present location point of the camera 1 based on the GPS satellite radio wave which received. As a its present location point specific method of a camera, an electric wave may be transmitted from a camera, the position information on a camera may be transmitted from a base station based on the position of the antenna which received this electric wave, and methods other than GPS, such as a method of a camera receiving this and specifying a its present location point, may be adopted.

[0020] As shown in drawing 3, the Radio Communications Department 10 is for connecting the camera 1 to the Internet 23 via the antenna 13 and the base station 22, and comprises a cellular-phone module and a PHS module, for example.

[0021] The monitor 11 is for displaying a data registration screen, a filming site point derivation screen, a data purchase screen, etc., comprises a liquid crystal display panel, for example, and is formed in the back part of the camera 1. The operation switch 12 is formed near the monitor 11, for example, is operated according to an operation request with monitor display or a sound.

[0022] The shutter speed adjusting unit 14, the diaphragm adjustment unit 15, the zooming adjustment unit 16, and the stroboscope 17 are for adjusting the photographing condition (shutter speed, a diaphragm, a focal distance, and stroboscope conditions) of the camera 1, and enable an automatic regulation of the photographing condition based on said photographing condition data.

[0023] A data registration program The mobile computer 18a, the desktop computer 18b, Filming site point data and photographing condition data are received from the self operation terminal 18c and bar code reader 20 grade, as these received data are registered into the storage parts store 5, it is for operating the camera 1, and various kinds of data registration gestalten are hereafter explained over Drawings.

[0024] Drawing 4 is an explanatory view in the case of registering the data of a data providing server into a camera via a mobile computer. As shown in this figure, the camera 1 is connected to the mobile computer 18a via the cable 19. The mobile computer 18a is connected to the Internet 23 via the radio router (not shown) which is provided with the wireless communication module 24, for example, is provided with the antenna 25. On the Internet 23, the data providing server 26 (WEB server) mentioned later exists, and the mobile computer 18a communicates with the data providing server 26 via a general-purpose browser. On a browser picture, search of a filming site point, a data purchasing contract, etc. are possible, and if a data purchasing contract is finished,

download of filming site point data and photographing condition data will be permitted. It is transmitted to the camera 1 via the cable 19, and the filming site point data and photographing condition data which were downloaded to the mobile computer 18a are registered into the storage parts store 5. Data registration can be performed by wireless, without using the cable 19, when the mobile computer 18a is provided with a infrared transmission port.

[0025] Drawing 5 is an explanatory view in the case of registering the data of a data providing server into a camera via a self operation terminal. As shown in this figure, the camera 1 is connected to the self operation terminal 18c installed in a convenience store etc. via the cable 19. The Internet 23 is accessed, for example via a router (not shown), and the self operation terminal 18c communicates with the data providing server 26 via an exclusive browser. On a browser picture, search of a filming site point, a data purchasing contract, etc. are possible, and if a data purchasing contract is finished, download of filming site point data and photographing condition data will be permitted. It is transmitted to the camera 1 via the cable 19, and the filming site point data and photographing condition data which were downloaded to the self operation terminal 18c are registered into the storage parts store 5. Data registration can be performed by wireless, without using the cable 19, when the self operation terminal 18c is provided with a infrared transmission port.

[0026] Drawing 6 is an explanatory view in the case of registering the data of CD-ROM into a camera via a desktop computer. As shown in this figure, the camera 1 is connected to the desktop computer 18b via the cable 19. The desktop computer 18b is provided with CD-ROM drive 27, and CD-ROM28 purchased beforehand is set. Filming site point data and photographing condition data are stored in CD-ROM28 with two or more sample pictures, filming site point data and photographing condition data selected from them are transmitted to the camera 1 via the cable 19, and it registers with the storage parts store 5. Data registration can be performed by wireless, without using the cable 19, when the mobile computer 18a is provided with a infrared transmission port.

[0027] Drawing 7 is an explanatory view in the case of registering the data of a photograph collection into a camera via a bar code reader. As shown in this figure, filming site point data and photographing condition data are printed as the bar code 29b with two or more scene photographs 29a by the photograph collection 29 purchased beforehand, and the bar code 29b of the scene photograph 29a selected from them is read by the bar code reader 20 to it. It has the infrared ray transmission section 20a, the filming site point data and photographing condition data which were read are transmitted to the camera 1 as an infrared signal, and the bar code reader 20 is registered into the storage parts store 5.

[0028] A filming site point derivation program specifies a filming site point based on the filming site point data registered into the storage parts store 5, and specifies the its present location point of the camera 1 based on a GPS satellite radio wave, and displays a map including both points on the monitor 11. The route from a its present location point to a filming site point is guided with the picture or sound on the monitor 11, and the camera 1 is operated so that a photography person may be promptly derived to a filming site point. Since concrete procedure, such as pinpointing of a point, a map display, and route guidance, is equivalent to the procedure adopted with the common car-navigation system, detailed explanation is omitted.

[0029] A data purchase program exchanges the data providing server 26 and an immediate-data purchasing contract, without going via said terminal 18, And it is for operating the camera 1 so that radiograph point data and photographing condition data may be received from the data providing server 26, and concrete procedure is mentioned later.

[0030] A photographing condition setting program is for operating the camera 1 so that a photographing condition (shutter speed, a diaphragm, a focal distance, and stroboscope conditions) may be automatically adjusted based on the photographing condition data registered into the storage parts store 5. As for the photographing condition corresponding to a predetermined filming site point, it is desirable for it not to be limited to one, to prepare two or more photographing conditions for every filming site point, and to enable it to choose arbitrarily according to the weather, exposure time, etc. A photographing condition may also attain to how to establish the position which stands not only for setting out of the camera 1 but a photography person, and the camera 1, composition, etc. When the camera 1 is a digital camera method, the image processing condition of digital image data, etc. can be included in photographing condition data.

[0031] Drawing 8 is a block diagram showing the composition of a filming site point derivation service system. As shown in this figure, the filming site point derivation service system 30 (photographing condition setting-out service system combination), In addition to the camera 1, the terminal 18, the base station 22, the Internet 23, and the data providing server 26 which were mentioned above, it has the lab 31 which publishes said CD-ROM28 and the photograph collection 29 (sale), and is constituted. The data providing server 26 is provided with the hardware and software for constituting a WEB server, and the terminal 18 is received, The narrowing retrieval function of a filming site point with a map, the narrowing retrieval function of the filming site point by a keyword, Provide the purchasing contract function of selected filming site point data, the download function of contracted data, etc., and the camera 1 is received, The their present location dot data from the camera 1 are received, and when there are a sales function to tell the filming site point which exists in the neighborhood, and a response which shows the volition of purchase from the camera 1, the function to conclude a purchasing contract, the download function of contracted data, etc. are provided.

[0032] Drawing 9 is a block diagram showing the database organization of a data providing server. As shown in this figure, the database 32 of the data providing server 26 is provided with the customer database 32a, the filming site point database 32b, the photographing condition database 32c, the taken image database 32d, and the fare data base 32e at least, and is constituted. That is, although filming site point data, photographing condition data, and photographed image data (sample picture) are provided for pay in principle, It may be made to provide all the data or some data for nothing by acquiring a profit by sale of related articles (a camera, a film, etc.) or services (DPE etc.), advertising printing to the data providing server 26, etc. I have filming site point data, photographing condition data, and photographed image data provided from a customer or a third party, and the function which pays a part of profit to a data donor may be added.

[0033] Drawing 10 is an explanatory view showing the example of a monitor display of a camera. As shown in this figure, at the time of filming site point derivation, a map is displayed on the monitor 11 of the camera 1, and the mark 35 grade which shows the mark 33 of the filming site point beforehand registered on this map, the sign 34 which shows that photographing condition data is registered, and the its present location point of the camera 1 is displayed. When a new filming site point is near the its present location point, based on the sales signal from the data providing server 26, the sign 36 for the notice of sales is displayed on a screen. Hereafter, the example of the camera operation by the voice guide and photography person of the camera 1 at the time of receiving a sales signal from the data providing server 26 is shown.

[0034] Camera: They are sales signal reception and the sign 36 to the monitor 11 Display

camera: "a good photography spot is in the neighborhood." (voice guide)

Camera : "do I send the image data of a sample?" (voice guide)

Photography person: Sample picture demand (camera operation)

Camera: "the sample picture Request to Send was received. A fee is 10 yen. "

Camera: It is a sample picture to the monitor 11 Display camera: "the display of the sample picture was completed." (voice guide)

Camera : "are filming site dot data purchased?" (voice guide)

Photography person: Purchase filming site dot data (camera operation).

Camera: "the order was accepted. A filming site point is displayed. A fee is 100 yen. " (voice guide)

Camera: It is the mark 33 of a filming site point to the monitor 11 Display camera: "the display of the filming site point was completed." (voice guide)

Camera : "how is photographing condition information?" (voice guide)

Photography person: Purchase photographing condition information (camera operation).

Camera: "the order was accepted. A photographing condition is transmitted. A fee is 50 yen. " (voice guide)

Camera: Display the sign 34 which shows existence of a photographing condition to the monitor 11.

[0035] Drawing 11 is a flow chart which shows the procedure of the data providing server in the case of making a data sale to a terminal. As shown in this figure, a Japanese map is displayed on a terminal screen, for example, and area, such as a northeast and Hokuriku, is shown in it. If the screen which will choose a prefecture next if a customer chooses "northeast area" is displayed and a customer chooses "Yamagata Prefecture", the map of Yamagata Prefecture is displayed. If a taken image sample is chosen here, two or more scenes will be displayed and photography travel area setting out (Step 101) and a sales filming site dot-data display (Step 102) will be completed now.

[0036] Next, if a customer chooses a specific scene from two or more scenes by which a screen display is carried out, a screen display of the message "whether filming site dot data are purchased" will be carried out. If a customer's buy button operation is judged here (Step 103), a screen display (Step 104) of the fee will be carried out, and a screen display of the message "whether filming site dot data are purchased to this [this] " will be carried out further. If a customer clicks a confirmation button, a screen display of the filming site dot data will be carried out, and the data for registering with the camera 1 is transmitted (Step 105), and it is saved at the storage parts store of the terminal 18.

[0037] Then, when the message to which the additional purchase of filming site dot data is urged is displayed (Step 106) and a customer chooses an additional purchase, a screen display of two or more scenes is carried out again (Step 102). When a customer refuses an additional purchase, it shifts to photographing condition information sale (Step 107). Since the procedure of photographing condition information sale is the same in the case of filming site dot-data sale, and abbreviation, detailed explanation is omitted.

[0038] In the constituted embodiment of the invention, the camera 1 is provided with the following like description.

The function to register filming site point data.

The function to derive a photography person to a predetermined filming site point based on this filming site point data.

That is, if the filming site point data provided by the data providing server 26, CD-ROM28, or

the photograph collection 29 is beforehand registered into the camera 1 when taking a photography trip, It not only can take a photograph at the capital filming site point which only a pro's cameraman can know, but [even if it is ordinary photography persons,] , It can become possible to reach the filming site point promptly and certainly, and, moreover, offer of the filming site point data to a photography person can be formed as business. What is necessary is for said filming site point guiding means not to have the necessity of assuming wide range movement like a car-navigation system, and just to deal with the data of the map in the surrounding area of the specified filming site point, etc., and there is an advantage which can be provided by a compact system.

[0039] Since the camera 1 is provided with the function to register the photographing condition data corresponding to a predetermined filming site point, and the function to set a predetermined photographing condition as the camera 1 based on this photographing condition data, It can prevent failure of photography by the setting error of a photographing condition, and, moreover, it not only can take a photograph by the optimal photographing condition in the filming site point, but can form offer of the photographing condition data to a photography person as business.

[0040] The camera 1 receives the Internet 23 to which the data providing server 26 is connected, In order to receive the filming site point data and photographing condition data which connection by the cable or a wireless state was possible, and the data providing server 26 transmitted and to register with the storage parts store 5, Without receiving local restrictions, can acquire filming site point data and photographing condition data, and moreover, when camera 1 self is provided with an Internet connectivity function, During a photography travel, filming site point data and photographing condition data can be suitably purchased now, As a result, failure which it not only can respond to a registration failure of filming site point data and photographing condition data, change of a travel destination, etc. easily, but overlooks the capital filming site point which exists in the middle can be prevented.

[0041] The camera 1 receives the terminal 18 connected to the data providing server 26 via the Internet 23, In order to receive the filming site point data and photographing condition data which connection by the cable or a wireless state was possible, and the data providing server 26 transmitted by terminal 18 course and to register with the storage parts store 5, Without receiving local restrictions, filming site point data and photographing condition data are acquirable, and especially the data providing server 26 receives the local data of the weather, a season, etc., and it becomes possible to provide the optimal photographing condition data for such a local situation. And if a mobile terminal provided with an Internet connectivity function is carried, During a photography travel, filming site point data and photographing condition data can be suitably purchased now, As a result, failure which it not only can respond to a registration failure of filming site point data and photographing condition data, change of a travel destination, etc. easily, but overlooks the capital filming site point which exists in the middle can be prevented.

[0042] The camera 1 receives the terminal 18 which can read the filming site point data and photographing condition data which were stored in CD-ROM28, In order to receive filming site point data and photographing condition data possible [by the cable or a wireless state] and stored in CD-ROM28 by terminal 18 course and to register with the storage parts store 5, If the mobile terminal which can perform registration of filming site point data and photographing condition data, and is moreover provided with CD-ROM drive 27 also at the terminal 18 which is not provided with an Internet connectivity function is carried, During a photography travel, filming site point data and photographing condition data can be suitably registered now, As a

result, failure which it not only can respond to a registration failure of filming site point data and photographing condition data, change of a travel destination, etc. easily, but overlooks the capital filming site point which exists in the middle can be prevented.

[0043] The camera 1 receives the bar code reader 20 which can read the filming site point data and photographing condition data which were printed by the photograph collection 29 as the bar code 29b, In order to receive the filming site point data and photographing condition data which connection by the cable or a wireless state was possible, and were printed by the photograph collection 29 as the bar code 29b by bar code reader 20 course and to register with the storage parts store 5, If registration of filming site point data and photographing condition data can be performed also in the situation which is not connectable with the Internet 23 and the photograph collection 29 and the bar code reader 20 are moreover carried, During a photography travel, filming site point data and photographing condition data can be suitably registered now, As a result, failure which it not only can respond to a registration failure of filming site point data and photographing condition data, change of a travel destination, etc. easily, but overlooks the capital filming site point which exists in the middle can be prevented.

[0044] The camera 1 displays the filming site point specified based on filming site point data, the its present location point of the camera 1 specified based on the GPS satellite radio wave, and a map including both points on the monitor 11, and. In order to derive a photography person to a predetermined filming site point in a guide with the picture or sound on the monitor 11, a photography person can be derived to a filming site point in accuracy equivalent to a car-navigation system, and, as a result, it enables a photography person to reach a filming site point promptly and certainly.

[0045]

[Effect of the Invention] Even if the cameras with a filming site point derivation function of this invention are ordinary photography persons by having constituted as mentioned above, it not only becomes possible to take a photograph at the capital filming site point which only a pro's cameraman can know, but they can reach the filming site point promptly and certainly.

[0046] Even if the cameras with a photographing condition setting up function of this invention are ordinary photography persons by having constituted as mentioned above, it not only becomes possible to take a photograph by the optimal photographing condition in the filming site point, but they can prevent failure of photography by the setting error of a photographing condition.

[0047] The filming site point derivation service system of this invention, It not only becomes possible to take a photograph at the capital filming site point which only a pro's cameraman can know, even if it is ordinary photography persons by having constituted as mentioned above, but, The filming site point can be reached promptly and certainly, and, moreover, offer of the filming site point data to a photography person can be formed as business.

[0048] The photographing condition setting-out service system of this invention, It not only becomes possible to take a photograph according to the optimal photographing condition that considered local environment, such as the weather, a season, etc. in the filming site point, even if it is ordinary photography persons by having constituted as mentioned above, but, Failure of photography by the setting error of a photographing condition can be prevented, and, moreover, offer of the photographing condition data to a photography person can be formed as business.

CLAIMS

[Claim(s)]

[Claim 1] A camera with a filming site point derivation function having a data registering means which registers filming site point data, and a filming site point guiding means which derives a photography person to a predetermined filming site point based on this filming site point data.

[Claim 2] A camera with a photographing condition setting up function having a data registering means which registers photographing condition data corresponding to a predetermined filming site point, and a photographing condition setting-out means to set a predetermined photographing condition as a camera based on this photographing condition data.

[Claim 3] As opposed to a network to which a data providing server is connected to said data registering means, The filming site point derivation function according to claim 1 or 2 and a camera with a photographing condition setting up function receiving filming site point data or photographing condition data which connection by cable or a wireless state was possible, and said data providing server transmitted, and registering with a storage parts store of a camera.

[Claim 4] As opposed to a terminal by which said data registering means is connected to a data providing server via a network, Connection by cable or a wireless state is possible, The filming site point derivation function according to any one of claims 1 to 3 and a camera with a photographing condition setting up function receiving filming site point data or photographing condition data which said data providing server transmitted via said terminal, and registering with a storage parts store of a camera.

[Claim 5] As opposed to a terminal [said data registering means] which can read filming site point data or photographing condition data stored in a predetermined storage, The filming site point derivation function according to any one of claims 1 to 4 and a camera with a photographing condition setting up function receiving via said terminal and registering filming site point data or photographing condition data possible [by cable or a wireless state] and stored in said storage into a storage parts store of a camera.

[Claim 6] As opposed to a reader [said data registering means] which can read filming site point data or photographing condition data printed by predetermined print media as a bar code, Connection by cable or a wireless state is possible, The filming site point derivation function according to any one of claims 1 to 5 and a camera with a photographing condition setting up function receiving via said reader and registering into a storage parts store of a camera filming site point data or photographing condition data printed by said print media.

[Claim 7] The filming site point derivation function according to any one of claims 1 to 6 and a camera with a photographing condition setting up function which a map characterized by comprising the following is displayed on a monitor, and are characterized by deriving a photography person to a predetermined filming site point in a guide with a monitor image or a sound.

A filming site point of having specified said filming site point guiding means based on said filming site point data.

A its present location point of a camera specified based on a GPS satellite radio wave.

Both points.

[Claim 8] In said camera, are accessible to a predetermined server which provides filming site point data or photographing condition data, The filming site point derivation function according to any one of claims 1 to 7 and a camera with a photographing condition setting up function having a data purchase means for performing purchase procedure of said filming site point data

or said photographing condition data between these servers.

[Claim 9] A filming site point derivation service system comprising containing a data providing server and two or more cameras:

A data registering means into which said data providing server has a data providing means which provides filming site point data, and said camera registers said filming site point data.

A filming site point guiding means which derives a photography person to a predetermined filming site point based on this filming site point data.

[Claim 10] A photographing condition setting-out service system comprising containing a data providing server and two or more cameras:

A data registering means into which said data providing server has a data providing means which provides photographing condition data corresponding to a predetermined filming site point, and said camera registers said photographing condition data.

A photographing condition setting-out means to set a predetermined photographing condition as a camera based on this photographing condition data.

[Claim 11] As opposed to a network to which said data providing server is connected to said data registering means, The filming site point derivation according to claim 9 or 10 and a photographing condition setting-out service system receiving filming site point data or photographing condition data which connection by cable or a wireless state was possible, and said data providing server transmitted, and registering with a storage parts store of a camera.

[Claim 12] As opposed to a terminal by which said data registering means is connected to said data providing server via a network, Connection by cable or a wireless state is possible, The filming site point derivation according to any one of claims 9 to 11 and a photographing condition setting-out service system receiving filming site point data or photographing condition data which said data providing server transmitted via said terminal, and registering with a storage parts store of a camera.

[Claim 13] The filming site point derivation according to any one of claims 9 to 12 and a photographing condition setting-out service system which a map characterized by comprising the following is displayed on a monitor, and are characterized by deriving a photography person to a predetermined filming site point in a guide with a monitor image or a sound.

A filming site point of having specified said filming site point guiding means based on said filming site point data.

A its present location point of a camera specified based on a GPS satellite radio wave.

Both points.

[Claim 14] In said camera, are accessible to a predetermined server which provides filming site point data or photographing condition data, The filming site point derivation according to any one of claims 9 to 13 and a photographing condition setting-out service system having a data purchase means for performing purchase procedure of said filming site point data or said photographing condition data between these servers.

DESCRIPTION OF DRAWINGS

[Drawing 1] It is a back perspective view of a camera.

[Drawing 2] It is a block diagram showing the composition of a camera.

[Drawing 3] It is an operation explanatory view of a GPS transmitting and receiving part and the Radio Communications Department.

[Drawing 4] It is an explanatory view in the case of registering the data of a data providing server into a camera via a mobile computer.

[Drawing 5] It is an explanatory view in the case of registering the data of a data providing server into a camera via a self operation terminal.

[Drawing 6] It is an explanatory view in the case of registering the data of CD-ROM into a camera via a desktop computer.

[Drawing 7] It is an explanatory view in the case of registering the data of a photograph collection into a camera via a bar code reader.

[Drawing 8] It is a block diagram showing the composition of a filming site point derivation service system.

[Drawing 9] It is a block diagram showing the database organization of a data providing server.

[Drawing 10] It is an explanatory view showing the example of a monitor display of a camera.

[Drawing 11] It is a flow chart which shows the procedure of the data providing server in the case of making a data sale to a terminal.

[Description of Notations]

1 Camera ; 4 Control unit ; 5 Storage parts store

6 Cable splicing section

7 Infrared ray communication section

8 GPS transmitting and receiving part

9 Loudspeaker

10 Radio Communications Department

11 Monitor

12 Operation switch

13 Antenna

14 Shutter speed adjusting unit

15 Diaphragm adjustment unit

16 Zooming adjustment unit

17 Stroboscope

18 Terminal

19 Cable

20 Bar code reader

23 Internet

26 Data providing server

28 CD-ROM

29 Photograph collection

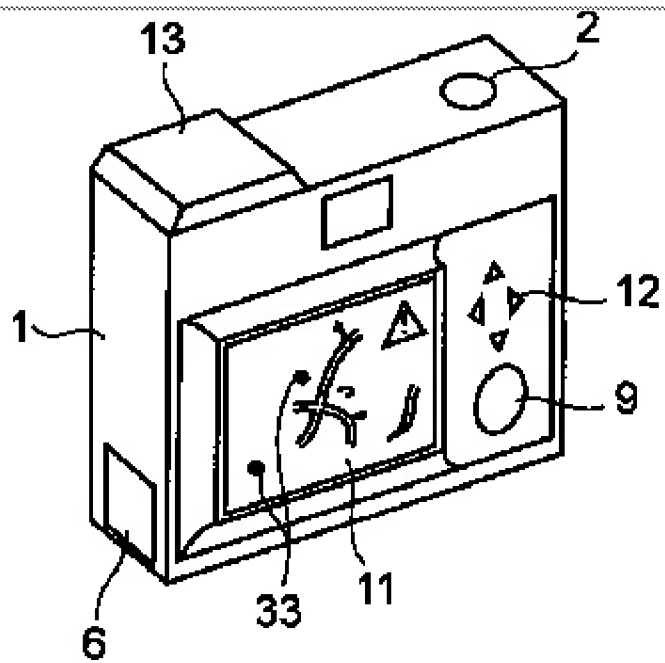
29b Bar code

30 Filming site point derivation service system

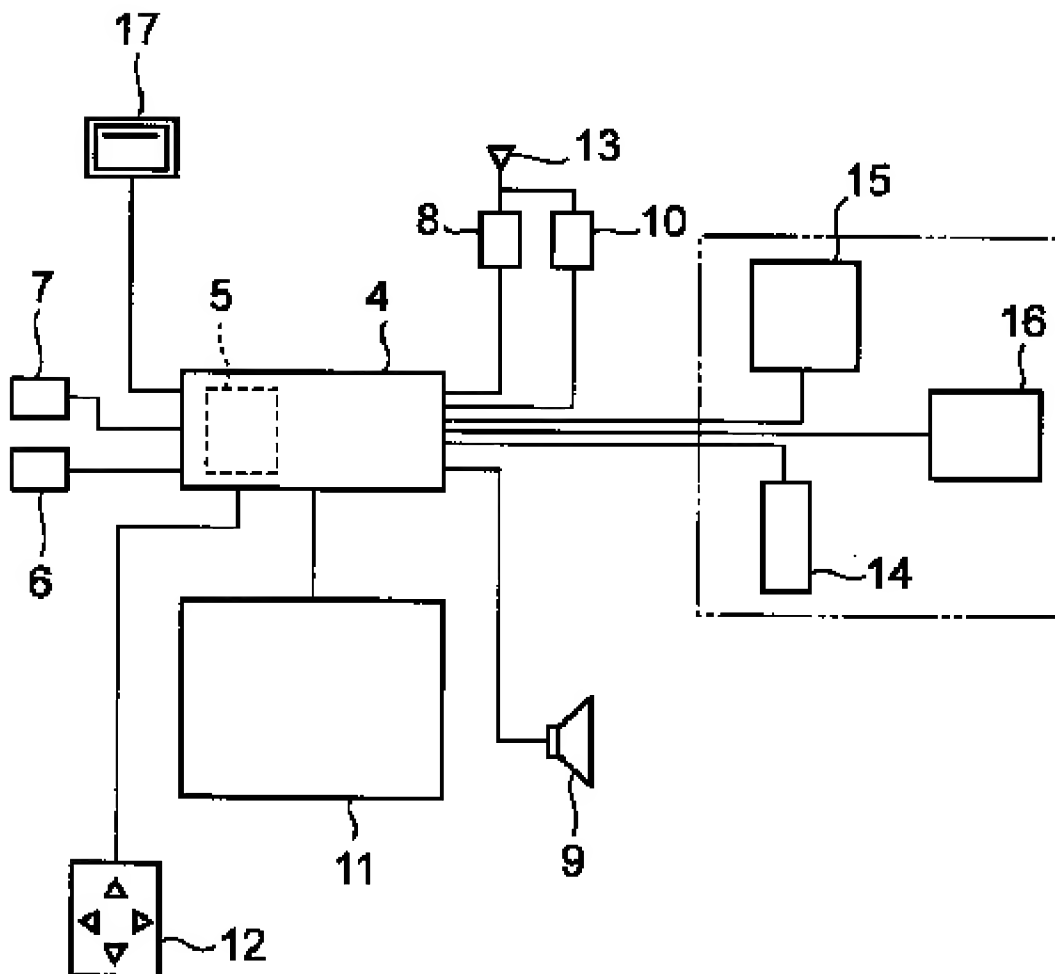
32 Database

DRAWINGS

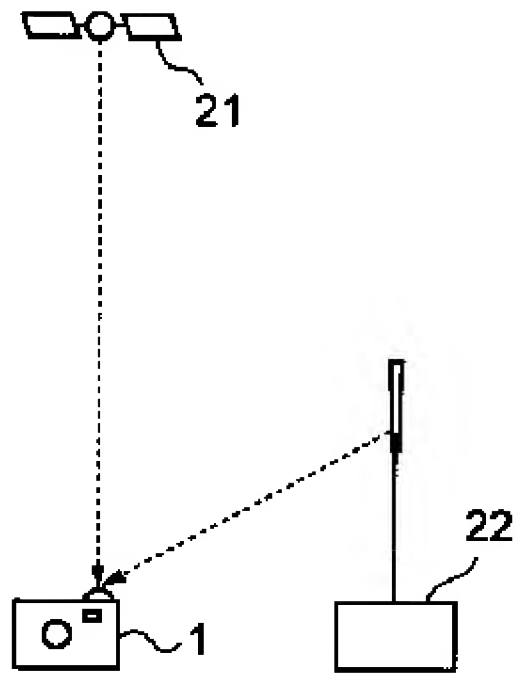
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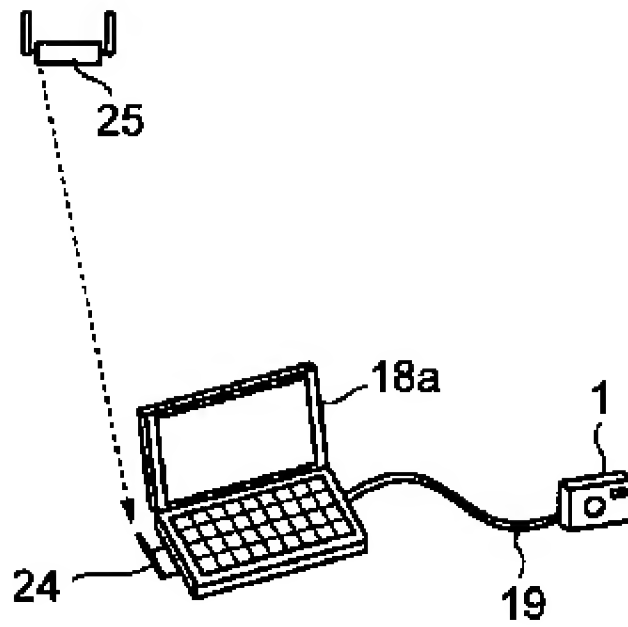
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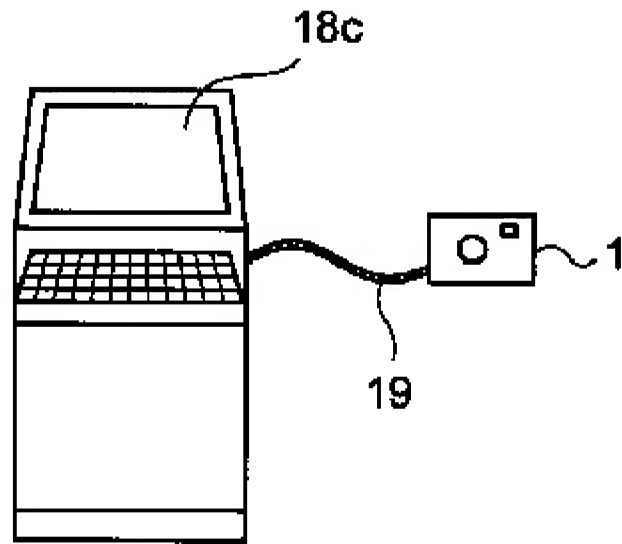
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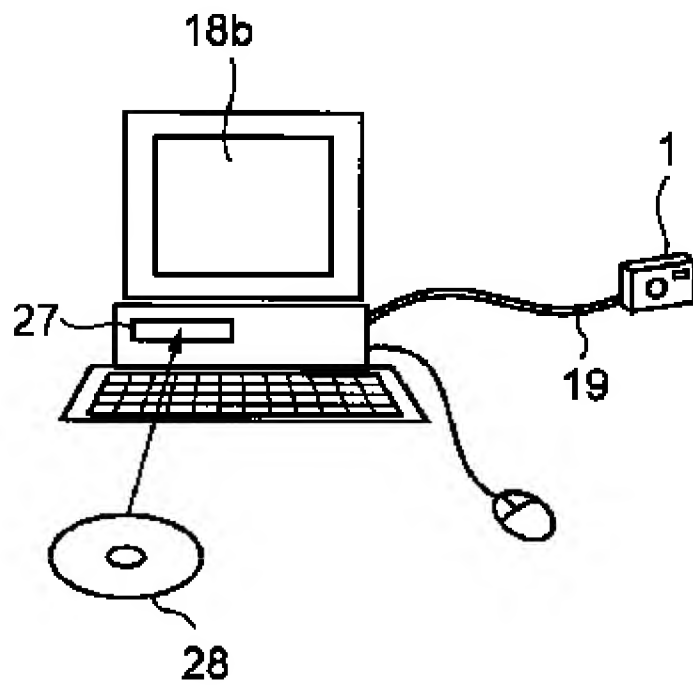
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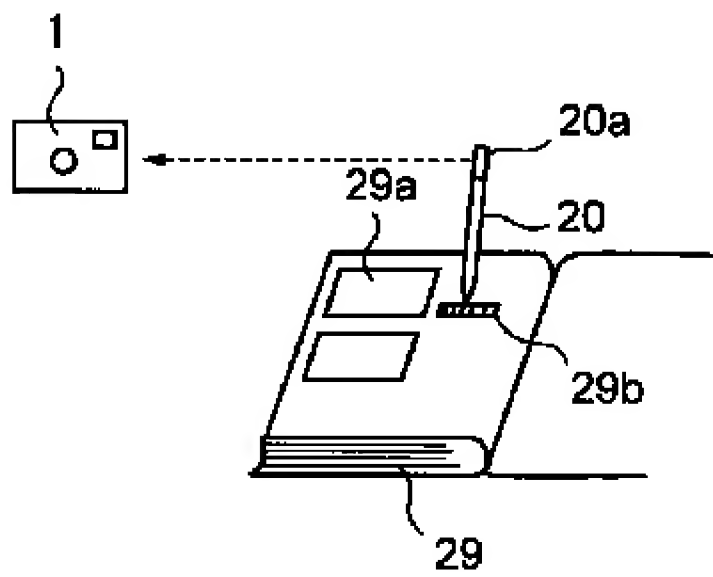
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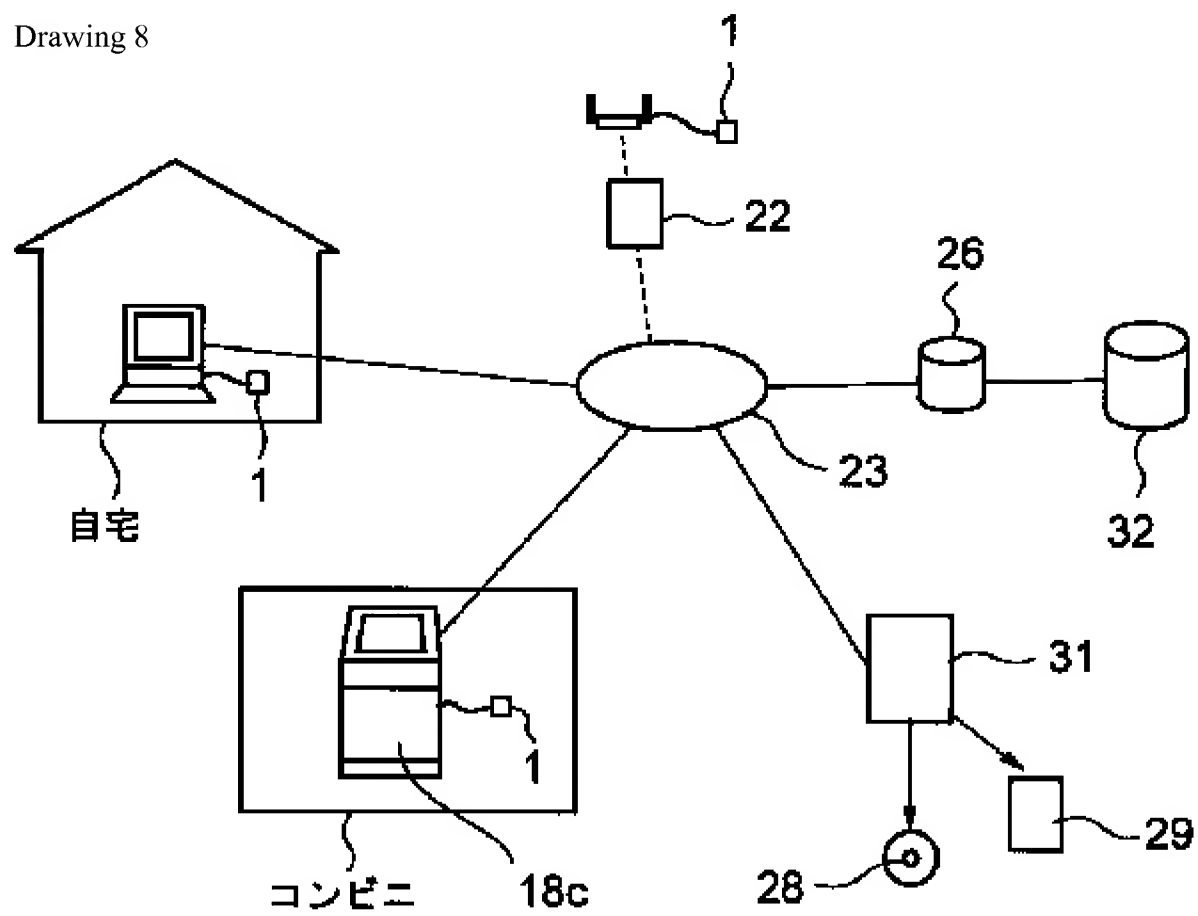
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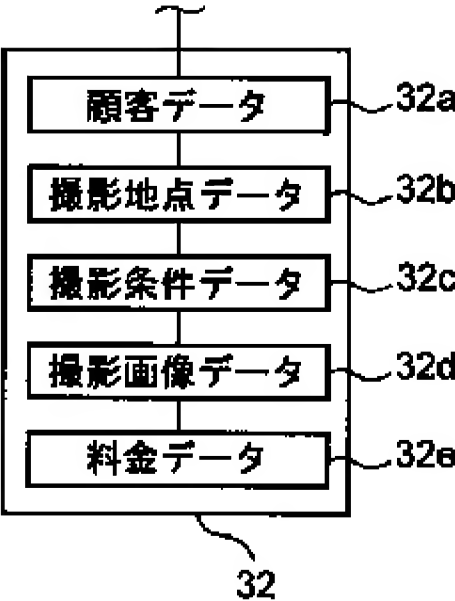
Drawing 7



Drawing 8



Drawing 9



Drawing 10

